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Ontario Road Safety Annual Report

1997

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Ontario Road Safety Annual Report



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If you are seeking information on how to reduce your risk of being in a collision, visit your local Ministry of Transportation (MTO) office for the latest copy of the Official Driver's Handbook, call General Publishing at (800) 387-0141 or (416) 445-3333 or from the Ministry of Transportation web site <<http://www.mto.gov.on.ca>>. For all other driver manuals and leaflets call (416) 235-3473 or for MTO information call (800) 268-4686. In addition, you may wish to borrow a road safety video from the Ontario Safety League (416) 620-1720.

Many of the publications are available at automotive retail outlets and book stores.

For more information on the data in this publication, please contact the Road Safety Program Office at (416) 235-3585.

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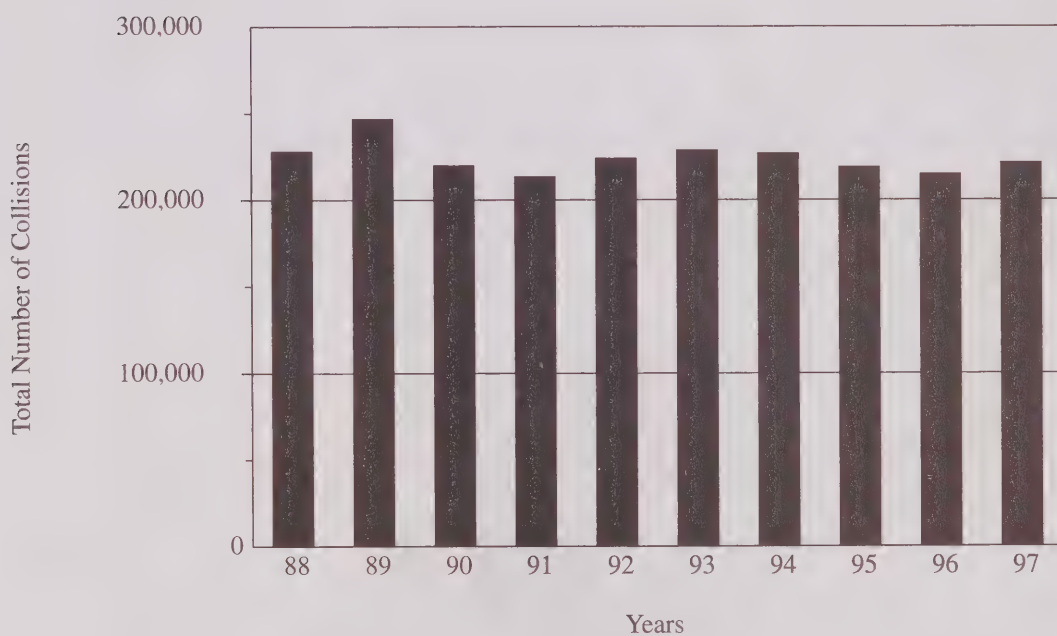
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1 Overview

Total Number of Collisions in Ontario - 1988 to 1997



1a. Synopsis**Selected Statistics**

Total Reportable Collisions	221,500
Total Drivers Involved in Collisions	396,704
Total Vehicles Involved in Collisions	413,077
Fatal Collisions	807
Personal Injury Collisions	56,121
Property Damage Collisions	164,572

Persons Killed	899
Drivers Killed	535
Drivers Killed (Impaired or Had Been Drinking)	134
Passengers Killed	227
Pedestrians Killed	133
Other Road Users Killed	6

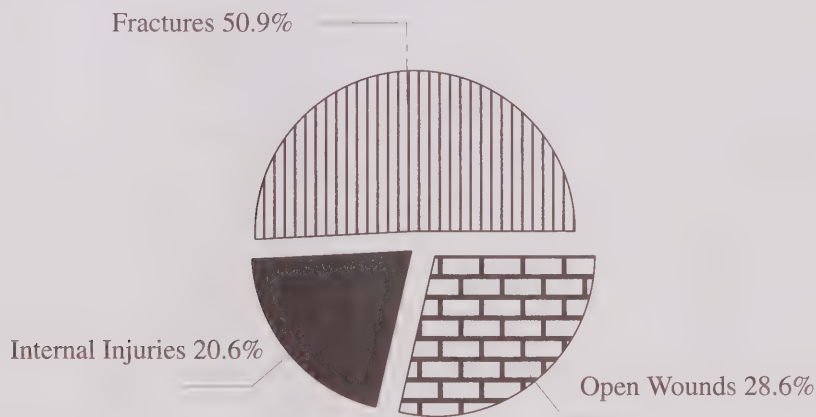
Persons Injured	85,527
Estimated Ontario Population (1997)	11,500,329
Licensed Drivers	7,537,607
Registered Motor Vehicles	6,592,484
Estimated Vehicle Kilometres Traveled (in millions)	81,732

Number of Persons Killed in Motor Vehicle Collisions per 100,000 People in Ontario	7.8
Number of Persons Killed in Motor Vehicle Collisions per 100 Million Kilometres Traveled	1.1
Collision Rate per 100 Million Kilometres Traveled	271.0
Fatal Collision Rate per 100 Million Kilometres Traveled	1.0

1b. Selected Characteristics of Motor Vehicle Collisions

On January 1, 1988 a new Motor Vehicle Accident Report (MVAR) form was introduced. The data includes the changes which were made to the form used by the police forces in Ontario, which forms the basis for the collision statistics compiled by the province of Ontario. This has resulted in changes in the ways in which the data are compiled. As a result, some of the information may not be directly comparable to data from years prior to 1988.

Per Cent of Hospital Admissions by Injury Type - 1997



1c. The Health Perspective

Selected Diagnoses of Motor Vehicle Collision Injuries Hospitalized in Ontario, 1996/97

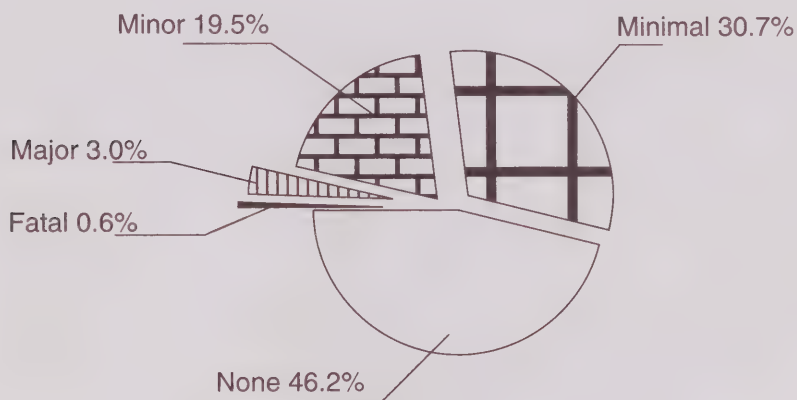
Selected Diagnoses	Hospital Admissions	Hospital Days of Stay
Fracture of skull	451	5,011
Fracture of neck and trunk	1,329	12,741
Fracture of upper limb	491	2,308
Fracture of lower limb	1,394	13,541
Dislocation, sprains and strains	259	1,008
Intracranial injury, excluding those with skull fracture	1,025	7,526
Internal injury of chest, abdomen and pelvis	560	6,146
Open wound of head, neck and trunk	182	513
Open wound of upper limb	38	177
Open wound of lower limb	50	390
Other injuries, burns and traumatic complications	1,933	34,883
Total Admissions and Days	7,712	84,244

Selected Surgical Procedures for Motor Vehicle Collision Injuries Hospitalized in Ontario, 1997

Selected Procedure	Hospital Admissions	Hospital Days of Stay
Operations on skull, brain and cerebral meninges	119	2,811
Operations on spinal cord and canal structures	58	1,042
Operations on nose, mouth and pharynx	33	167
Operations on chest wall, pleura, mediastinum and diaphragm	119	2,517
Operations on bone marrow and spleen	85	1,492
Operations on kidney	25	113
Operation on facial bones and joints	141	1,014
Reduction of fracture and dislocation	1,676	16,674
Repair and plastic operations on joint structures	150	2,473
Operations on skin and subcutaneous tissue	390	2,301
Other surgical procedure	546	9,258
Sub-total of surgical admission and days	3,342	39,862
No surgical procedures reported	4,370	44,382
Total Admissions and Days	7,712	84,244

2 The People

Per Cent of Involved Persons in Collisions by Severity of Injury - 1997



2a. People in Collisions

**Table 2.1 Category of Involved Person by Severity of Injury
in Fatal and Personal Injury Collisions 1997**

Category of Involved Person	Severity of Injury					Total
	None	Minimal	Minor	Major	Fatal	
Drivers	47,005	28,870	16,713	2,278	474	95,340
Passenger*	26,269	16,368	10,014	1,476	224	54,351
Pedestrian	120	2,102	2,452	600	133	5,407
Cyclist	47	1,491	1,347	159	22	3,066
Cyclist Passenger	10	51	37	10	1	109
All Terrain Vehicle Driver	8	10	6	4	1	29
All Terrain Vehicle Passenger	5	8	5	3	0	21
Snow Vehicle Driver	9	23	25	22	1	80
Snow Vehicle Passenger	5	5	12	5	3	30
Motorcycle Driver	65	307	516	170	36	1,094
Motorcycle Passenger	24	72	124	59	2	281
Moped Driver	3	1	5	1	1	11
Moped Passenger	0	1	0	0	0	1
Hanger On	22	23	29	11	0	85
Other	670	54	50	8	1	783
Total	74,262	49,386	31,335	4,806	899	160,688

* Includes bus passengers.

Due to a change in the method of tabulating collision statistics this table excludes individuals involved in property damage only collisions.

Fatal Person killed immediately or within 30 days of the motor vehicle collision.

Major Person admitted to hospital. Includes person admitted for observation.

Minor Person went to hospital and was treated in the emergency room but was not admitted.

Minimal Person did not go to hospital when leaving the scene of the collision. Includes minor abrasions, bruises and complaint of pain.

None Uninjured person.

Table 2.2 Category of Person Killed by Age Groups 1997

Category of Person	Age Groups																Total	
	0-4	5-9	10-15	16	17	18	19	20	21-24	25-34	35-44	45-54	55-64	65-74	75+	UK		
Drivers	0	0	1	2	7	9	16	9	46	92	74	72	52	47	47	0	474	
Passenger	16	10	11	14	10	12	11	6	17	29	18	11	21	12	26	0	224	
Pedestrian	2	8	11	3	3	5	3	3	5	13	12	8	13	17	27	0	133	
Cyclist	0	0	6	0	0	0	2	0	3	5	1	1	1	3	0	0	22	
Cyclist Passenger	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
ATV Driver	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
ATV Passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Snow Vehicle Driver	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	
Snow Vehicle Passenger	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	3	
Motorcycle Driver	0	0	0	2	0	1	1	1	6	14	7	1	2	1	0	0	36	
Motorcycle Passenger	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2	
Moped Driver	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
Moped Passenger	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Other	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Total	19	18	31	22	20	28	33	19	78	154	113	94	89	80	101	0	899	

These are deaths in Highway Traffic Act (HTA) reportable collisions only. For more information on special vehicles see Chapter 6.

Table 2.3 Category of Persons Injured by Age Groups 1997

Category of Person	Age Groups															Total	
	0-4	5-9	10-15	16	17	18	19	20	21-24	25-34	35-44	45-54	55-64	65-74	75+	UK	
Driver	4	1	53	224	852	1,112	1,164	1,215	4,584	12,511	11,320	7,450	3,788	2,241	1,257	85	47,861
Passenger*	1,171	1,846	2,491	819	974	1,009	927	817	2,576	4,668	3,346	2,532	1,631	1,378	866	864	27,915
Pedestrian	174	413	799	123	118	99	102	107	370	765	652	472	337	266	229	128	5,154
Cyclist	29	252	663	94	72	78	76	79	226	536	379	172	82	39	12	208	2,997
Cyclist Passenger	4	6	21	8	0	3	1	4	11	23	10	7	2	0	0	1	101
ATV Driver	0	1	5	2	0	0	2	0	1	4	1	2	1	1	0	0	20
ATV Passenger	2	0	6	0	0	0	1	0	1	4	0	1	1	0	0	0	16
Snow Vehicle Driver	0	1	12	7	7	5	3	1	9	15	5	1	2	2	0	0	70
Snow Vehicle Passenger	0	4	6	3	3	1	2	1	0	3	1	0	0	0	0	0	24
Motorcycle Driver	0	0	9	25	37	26	36	32	142	316	190	135	31	9	0	5	993
Motorcycle Passenger	1	3	10	9	8	11	8	10	41	57	44	31	14	2	0	6	255
Moped Driver	0	0	0	1	0	1	0	0	0	1	0	2	2	0	0	0	7
Moped Passenger	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Other	5	6	5	1	0	4	1	3	8	12	24	11	9	5	5	14	113
Total	1,390	2,533	4,080	1,316	2,072	2,349	2,323	2,269	7,969	18,915	15,972	10,816	5,900	3,943	2,369	1,311	85,527

* Includes 63 Hangers On

These are injuries in Highway Traffic Act (HTA) reportable collisions only. For more information on special vehicles see Chapter 6.

**Table 2.4 Sex of Driver by
Class of Collision 1997**

Sex of Driver	Class of Collision			Total
	Fatal	Personal	Property	
		Injury	Damage	
Male	1,044	69,230	199,757	270,031
Female	293	35,897	87,373	123,563
Unknown*	2	534	2,574	3,110
Total	1,339	105,661	289,704	396,704

Fatal Collision A motor vehicle collision in which at least one person sustains bodily injuries resulting in death. Prior to January 1, 1982, fatal collision statistics included deaths attributed to accidental injuries up to one year after the collision. Since that date, only deaths from injuries within thirty days of the collision have been included.

Personal Injury Collision A motor vehicle collision in which at least one person involved sustains bodily injuries not resulting in death.

Property Damage Collision A motor vehicle collision in which no person sustains bodily injury, but in which there is damage to any public property or damage to private property including damage to the motor vehicle or its load.

The minimum reportable level for property damage only collision rose from \$200 to \$400 on January 1, 1978 and rose again to \$700 on January 1, 1985.

On January 1, 1997 Collision Self-Reporting for property damage only collisions was introduced. See Appendix for more explanation about Collision Self-Reporting.

**Table 2.5 Driver Condition by
Class of Collision 1997**

Condition of Driver	Class of Collision			Total
	Fatal	Personal	Property	
		Injury	Damage	
Normal	929	85,834	234,824	321,587
Had Been Drinking	65	2,073	3,079	5,217
Ability Impaired -				
Alcohol over .08	131	1,142	1,983	3,256
Ability Impaired Alcohol	17	590	677	1,284
Ability Impaired Drugs	14	56	94	164
Fatigue	15	542	875	1,432
Medical Physical Defect	8	471	453	932
Inattentive	45	6,312	11,690	18,047
Other	6	245	547	798
Unknown*	109	8,396	35,482	43,987
Total	1,339	105,661	289,704	396,704

Had Been Drinking Driver had consumed alcohol according to the police but his/her physical condition was not legally impaired.

Ability Impaired Alcohol Over .08 Driver had consumed alcohol and upon testing was found to have a blood alcohol level in excess of 80 mg%. Eighty mg alcohol per 100 ml of blood is the legal limit in the province of Ontario.

Ability Impaired Alcohol Driver had consumed sufficient alcohol to warrant being charged with a drinking and driving offence.

Inattentive Driver was operating a motor vehicle without due care and attention or placing less than full concentration on driving, e.g., changing radio stations, consuming food, reading, talking on phone or two-way radio, using headphones.

* This includes situations where the enforcement officer is unable to make a determinations e.g. hit and run.

Table 2.6 Driver Age by Driver Condition In all Collisions 1997*

Driver	Driver Condition						Total
Age		Had Been Drinking	Impaired Alcohol over .08	Ability Impaired Alcohol	Other	Unknown	
Under 16	1,059	17	5	2	225	158	1,466
16	1,549	23	12	3	188	144	1,919
17	6,229	67	29	10	623	394	7,352
18	7,313	130	53	20	791	541	8,848
19	7,178	224	68	34	680	541	8,725
20	7,338	226	96	33	641	534	8,868
21-24	29,503	820	370	113	2,105	2,212	35,123
25-34	82,884	1,544	960	381	4,729	6,248	96,746
35-44	76,841	1,114	903	380	4,070	5,471	88,779
45-54	51,195	561	478	177	2,843	3,551	58,805
55-64	26,676	242	178	65	1,620	1,731	30,512
65-74	15,432	106	69	30	1,361	1,018	18,016
75 & over	7,331	24	19	2	1,112	556	9,044
Unknown	1,059	119	16	34	385	20,888	22,501
Total	321,587	5,217	3,256	1,284	21,373	43,987	396,704

* Includes all drivers in Highway Traffic Act (HTA) reportable collisions.

Table 2.7 Recorded Occurrence of Driver Condition In Drivers Killed 1997*

Recorded Occurrence	Number of Drivers	Drivers %
Normal	320	59.7
Had Been Drinking	27	5.0
Ability Impaired - Alcohol over .08	100	18.7
Ability Impaired Alcohol	7	1.3
Ability Impaired Drugs	14	2.6
Fatigue	7	1.3
Medical Physical Defect	5	0.9
Inattentive	15	2.8
Other	3	0.6
Unknown	38	7.1
Total	536	100.0

* In previous years Table 2.7 only included fatally injured drivers who were either normal or had been drinking. In order to better examine the other pre-crash factors related to deaths of all drivers this table has now been expanded to include the driver conditions of fatally injured drivers. These data can be recombined into the older format by recalculating the percentages based on only the alcohol and normal driver's data.

Table 2.8 Apparent Driver Action by
Class of Collision 1997

Apparent Driver Action	Class of Collision			Total
	Fatal	Personal Injury	Property Damage	
Driving Properly	566	50,560	142,072	193,198
Following Too Close	9	9,318	19,206	28,533
Speed Too Fast	68	1,150	1,576	2,794
Speed Too Fast for Conditions	76	5,023	14,624	19,723
Speed Too Slow	0	45	206	251
Improper Turn	19	3,584	10,508	14,111
Disobey Traffic Control	63	4,855	6,485	11,403
Fail to Yield				
Right of Way	93	11,005	23,934	35,032
Improper Passing	25	698	2,510	3,233
Lost Control	192	7,762	20,220	28,174
Wrong Way on				
One Way Road	4	142	174	320
Improper Lane Change	13	1,645	7,801	9,459
Other*	122	6,590	16,987	23,699
Unknown	89	3,284	23,401	26,774
Total	1,339	105,661	289,704	396,704

* Includes actions defined as careless driving, inattentive driving, fell asleep, wrong side of road, improper parking, impaired, illegally parked, dangerous driving, inexperience, etc.

Table 2.9 Seat Belt Usage by Severity of Driver Injury in Fatal and Personal Injury Collisions 1997

Safety Equipment Used	Severity of Injury					Total
	Killed	Major	Minor	Minimal	Not Injured	
Seat Belt Used	273	1,622	14,337	26,242	41,685	84,159
Other Equipment*	15	67	405	463	236	1,186
Equipment Not used	129	287	714	374	301	1,805
No Safety Equipment	2	7	42	36	54	141
Use Unknown	55	295	1,215	1,755	4,729	8,049
Total	474	2,278	16,713	28,870	47,005	95,340

* Other equipment includes helmets, including construction, motorcycle helmets, etc. It also includes the use of airbags. Seat belt usage in conjunction with airbag deployment is unknown.

The tables on this page include only seat belt usage in collisions in which there were personal injuries or fatalities. Property damage only collisions are excluded. ORSARs published prior to 1988, included seat belt usage in all collisions.

Table 2.10 **Seat Belt Usage by Severity of Passenger Injury in Fatal and Personal Injury Collisions 1997**

Safety Equipment Used	Severity of Injury					Total
	Killed	Major	Minor	Minimal	Not Injured	
Seat Belt Used	118	923	7,826	14,071	21,411	44,349
Child Safety Seat						
Used Incorrectly	0	2	20	20	78	120
Child Safety Seat						
Used Correctly	8	17	144	329	1,502	2,000
Other Equipment*	3	24	136	103	79	345
Equipment Not used	63	281	798	488	386	2,016
No Safety Equipment	5	67	454	547	757	1,830
Use Unknown	27	168	622	757	2,011	3,585
Total	224	1,482	10,000	16,315	26,224	54,245

* Other equipment includes helmets, including construction, motorcycle helmets, etc. It also includes the use of airbags. Seat belt usage in conjunction with airbag deployment is unknown.

Table 2.11 **Restraints Use for Children (0 - 4 Years) Killed in Collisions 1993-1997**

Year	Child Restraint	Child Restraint	Lap/Lap &	Restraint	Available	Use	Total
Used	Used Correctly	Used Incorrectly	Shoulder Belt	Not Available	Not Used	Unknown	
1993	5	1	5	1	0	0	12
1994	5	0	4	1	2	1	13
1995	5	2	10	1	2	0	20
1996	3	1	1	0	1	0	6
1997	8	0	4	0	2	2	16

Table 2.12 **Restraint Use for Children (0 - 4 Years)**
Involved in Fatal and Personal Injury Collisions by Severity of Injury 1997

Restraint Used	Injury Level		
	Major / Fatal %	Minimal/Minor %	No Injuries %
Child Restraint Used Correctly	32.9	37.4	43.3
Child Restraint Used Incorrectly	2.7	3.5	2.2
Lap/Lap-Shoulder Belt	37.0	48.0	47.1
Not Available	-	2.9	1.7
Available/Not Used	20.5	3.5	1.0
Other	1.4	0.4	0.2
Unknown	5.5	4.4	4.4
Total	100.0	100.0	100.0

It is known from observation surveys that many child safety seats are not used correctly. This is not clear in these tables since children are often removed from the child safety seat before the police officer arrives on the scene. Both correct installation of the seats according to the manufacturer's instructions and correct use of the device in the vehicle are important for the child's protection.

Table 2.13 **Pedestrian Condition by
Severity of Injury 1997**

Condition of Pedestrian	Killed	Injured
Normal	69	3,360
Had Been Drinking	4	285
Ability Impaired Alcohol over .08	18	15
Ability Impaired Alcohol	5	93
Ability Impaired Drugs	3	13
Fatigue	0	3
Medical or Physical Defect	7	74
Inattentive	11	632
Other	2	76
Unknown	14	603
Total	133	5,154

Table 2.14 **Apparent Pedestrian Action
by Severity of Injury 1997**

Apparent Pedestrian Action	Killed	Injured
Crossing Intersection With Right of Way	11	1,453
Crossing Intersection Without Right of Way	23	826
Crossing Intersection No Traffic Control*	31	441
Crossing Pedestrian Crossover	1	139
Crossing Marked Crosswalk Without Right of Way	2	99
Walking on Roadway With Traffic	6	137
Walking on Roadway Against Traffic	4	73
On Sidewalk or Shoulder	15	346
Playing or Working on Highway	0	72
Coming from Behind Parked Vehicle or Object	2	161
Running onto Roadway	12	594
Getting On/Off School Bus**	1	3
Getting On/Off Vehicle	0	76
Pushing/Working on Vehicle	0	38
Other	25	696
Unknown	0	0
Total	133	5,154

* Calendar Year

** While crossing at an uncontrolled intersection or a non-intersection without traffic control.

2b. Putting the People in Context

Table 2.15 Category of Persons Killed and Injured 1988-1997

Year	Ontario												
	Population	Driver		Passenger*		Pedestrian		All Others		Persons Killed		Persons Injured	
	(Est.)									In All Classes		In All Classes	
										Rate Per		Rate Per	
		Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Number	100,000	Number	100,000
1988	9,439,600	563	63,339	350	39,157	186	6,344	138	9,318	1,237	13.1	118,158	1,251.7
1989	9,598,600	627	66,334	369	39,950	161	6,187	129	8,181	1,286	13.4	120,652	1,257.0
1990	9,743,300	540	55,073	321	33,606	154	5,839	105	7,057	1,120	11.5	101,575	1,042.5
1991	10,084,900	542	48,021	298	30,230	157	5,352	105	6,916	1,102	10.9	90,519	897.6
1992	10,098,600	548	49,259	317	30,567	140	5,177	85	6,022	1,090	10.8	91,025	901.4
1993	10,813,200	595	49,628	296	30,584	146	5,181	98	5,756	1,135	10.5	91,149	842.9
1994	10,927,800	508	49,632	273	29,570	127	5,344	91	5,484	999	9.1	90,030	823.9
1995	11,100,000	527	49,916	276	29,440	126	5,261	70	4,955	999	9.0	89,572	807.0
1996	11,320,456	459	49,614	270	28,997	144	5,336	55	4,458	928	8.2	88,405	780.9
1997	11,500,329	474	47,861	224	27,915	133	5,154	68	4,597	899	7.8	85,527	743.7

* Excludes motorcycle passengers, which are included with "All Others".

Table 2.16 Sex of Driver Population by Age Groups 1997

Sex of	Age Groups							Total
Driver	16-19	20-24	25-34	35-44	45-54	55-64	65+	
Male	211,910	329,767	843,170	931,966	720,190	465,498	525,529	4,028,030
Female	182,602	294,765	768,538	857,144	640,365	372,108	394,055	3,509,577
Total	394,512	624,532	1,611,708	1,789,110	1,360,555	837,606	919,584	7,537,607

Table 2.17 Driver Population by Age Groups 1988-1997

Year	Age Groups							Total
	16-19	20-24	25-34	35-44	45-54	55-64	65+	
1988	310,764	643,691	1,588,516	1,353,841	898,103	714,266	608,931	6,118,112
1989	323,109	631,470	1,634,187	1,409,053	931,991	720,788	639,826	6,290,424
1990	322,542	629,478	1,666,474	1,467,699	964,925	728,380	669,385	6,448,883
1991	319,584	627,931	1,673,502	1,501,765	1,018,365	736,652	696,432	6,574,231
1992	314,685	623,707	1,665,433	1,528,726	1,082,883	745,759	727,568	6,688,761
1993	326,389	621,934	1,655,573	1,566,083	1,136,365	758,840	758,244	6,823,428
1994	358,817	622,704	1,645,962	1,611,972	1,190,442	770,882	783,181	6,983,960
1995	360,847	614,094	1,621,989	1,659,749	1,240,072	782,871	806,396	7,086,018
1996	361,571	612,060	1,608,567	1,717,050	1,297,289	805,486	856,144	7,258,167
1997	394,512	624,532	1,611,708	1,789,110	1,360,555	837,606	919,584	7,537,607

Table 2.18 Driver Licence Class by Sex 1997

Licence Class	Driver Sex				Total	%
	Male	%	Female	%		
A	83,188	2.07	1,383	.04	84,571	1.12
AB	4,254	.11	412	.01	4,666	.06
ABM	2,344	.06	122	.00	2,466	.03
ABM1	23	0.00	6	0.00	29	0.00
ABM2	72	.00	10	0.00	82	.00
AC	14,466	.36	377	.01	14,843	.20
ACM	7,419	.18	98	.00	7,517	.10
ACM1	104	.00	2	0.00	106	.00
ACM2	236	.01	3	0.00	239	.00
AM	29,062	.72	180	.01	29,242	.39
AM1	504	.01	6	0.00	510	.01
AM2	940	.02	19	0.00	959	.01
B	16,125	.40	15,380	.44	31,505	.42
BM	4,539	.11	889	.03	5,428	.07
BM1	52	.00	29	0.00	81	.00
BM2	124	.00	65	.00	189	.00
C	5,825	.14	431	.01	6,256	.08
CM	1,766	.04	54	.00	1,820	.02
CM1	18	0.00	2	0.00	20	0.00
CM2	43	.00	7	0.00	50	0.00
D	213,655	5.30	13,719	.39	227,374	3.02
DE	107	.00	14	0.00	121	.00
DEM	30	0.00	1	0.00	31	0.00
DEM1	0	.00	1	0.00	1	0.00
DEM2	2	0.00	0	.00	2	0.00
DF	2,131	.05	84	.00	2,215	.03
DFM	975	.02	18	0.00	993	.01
DFM1	17	0.00	1	0.00	18	0.00
DFM2	24	0.00	1	0.00	25	0.00
DM	52,582	1.31	925	.03	53,507	.71
DM1	636	.02	20	0.00	656	.01
DM2	1,270	.03	67	.00	1,337	.02
E	1,294	.03	2,126	.06	3,420	.05
EM	193	.00	50	.00	243	.00
EM1	3	0.00	3	0.00	6	0.00
EM2	5	0.00	7	0.00	12	0.00

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Table 2.18

Driver Licence Class by Sex 1997

Continued

Licence	Driver Sex				Total	%
Class	Male	%	Female	%		
F	7,601	.19	5,027	.14	12,628	.17
FM	1,789	.04	283	.01	2,072	.03
FM1	32	.00	14	.00	46	.00
FM2	91	.00	21	0.00	112	.00
G	2,822,391	70.07	3,016,759	85.96	5,839,150	77.47
G1	134,247	3.33	169,902	4.84	304,149	4.04
G1M	102	.00	17	0.00	119	.00
G1M1	623	.02	61	.00	684	.01
G1M2	522	.01	66	.00	588	.01
G2	245,247	6.09	222,829	6.35	468,076	6.21
G2M	682	.02	85	.00	767	.01
G2M1	1,904	.05	140	.00	2,044	.03
G2M2	2,763	.07	195	.01	2,958	.04
GM	335,779	8.34	51,441	1.47	387,220	5.14
GM1	10,372	.26	2,020	.06	12,392	.16
GM2	17,363	.43	3,787	.11	21,150	.28
M	1,473	.04	284	.01	1,757	.02
M1	398	.01	41	.00	439	.01
M2	623	.02	93	.00	716	.01
Other	0	.00	0	.00	0	.00
Total	4,028,030	100	3,509,577	100	7,537,607	100

Table 2.19 Licensed Drivers, Total Collisions, Persons Killed and Injured 1931-1997

Year	Licensed Drivers	Total Collisions	Persons Killed	Persons Injured
1931	666,266	9,241	571	8,494
1932	648,710	9,171	502	8,231
1933	638,710	8,634	403	7,877
1934	665,743	9,645	512	8,990
1935	707,457	10,648	560	9,839
1936	755,765	11,388	546	10,251
1937	802,765	13,906	766	12,092
1938	866,729	13,715	640	11,683
1939	899,572	13,710	652	11,638
1940	937,551	16,921	716	13,715
1941	986,773	18,167	801	14,275
1942	961,883	13,490	567	10,205
1943	919,457	11,025	549	8,628
1944	905,650	11,004	498	8,373
1945	971,852	13,458	598	9,804
1946	1,087,445	17,356	688	12,228
1947	1,144,291	22,293	734	13,056
1948	1,209,408	27,406	740	14,970
1949	1,278,584	34,472	830	17,469
1950	1,366,388	43,681	791	19,940
1951	1,461,538	54,920	949	22,557
1952	1,556,559	58,515	1,010	23,643
1953	1,656,259	65,866	1,082	24,353
1954	1,747,567	62,509	1,045	24,607
1955	1,856,845	63,219	1,111	26,246
1956	1,967,789	71,399	1,180	28,626
1957	2,088,551	76,302	1,279	30,414
1958	2,176,417	76,884	1,112	30,106
1959	2,270,246	81,518	1,187	31,602
1960	2,355,567	87,186	1,166	34,436
1961	2,414,615	85,577	1,268	37,146
1962	2,469,425	94,231	1,383	41,766
1963	2,555,015	104,919	1,421	47,801
1964	2,694,023	111,232	1,424	54,560
1965	2,739,138	128,462	1,611	60,917
1966	2,821,648	139,781	1,596	65,210
1967	3,004,654	145,008	1,719	67,280
1968	3,128,509	155,127	1,586	71,520
1969	3,247,979	169,395	1,683	74,902
1970	3,422,892	141,609	1,535	75,126
1971	3,563,197	158,831	1,769	84,650
1972	3,688,541	189,494	1,934	95,181

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Table 2.19 Licensed Drivers, Total Collisions, Persons Killed and Injured 1931-1997

Year	Licensed Drivers	Total Collisions	Persons Killed	Persons Injured
1973	3,841,628	193,021	1,959	97,790
1974	3,972,980	204,271	1,748	98,673
1975	4,160,623	213,689	1,800	97,034
1976	4,315,925	211,865	1,511	83,736
1977	4,562,903	218,567	1,420	95,664
1978	4,725,546	186,363	1,450	94,979
1979	4,858,351	197,196	1,560	101,321
1980	4,993,531	196,501	1,508	101,367
1981	5,123,177	198,372	1,445	100,321
1982	5,247,198	187,943	1,138	92,815
1983	5,380,259	181,999	1,204	91,706
1984	5,513,911	194,782	1,132	97,230
1985	5,660,422	189,750	1,191	109,169
1986	5,817,799	187,286	1,102	108,839
1987	5,978,105	203,431	1,229	121,089
1988	6,118,112	228,398	1,237	118,158
1989	6,290,424	247,038	1,286	120,652
1990	6,448,883	220,188	1,120	101,575
1991	6,574,231	213,669	1,102	90,519
1992	6,688,761	224,249	1,090	91,025
1993	6,823,428	228,834	1,135	91,149
1994*	6,983,960	226,996	999	90,030
1995	7,086,018	219,085	999	89,572
1996	7,258,167	215,024	929	88,445
1997	7,537,607	221,500	899	85,527

* Graduated Licensing System (GLS) began on April 1, 1994. See Appendix for further details on GLS.

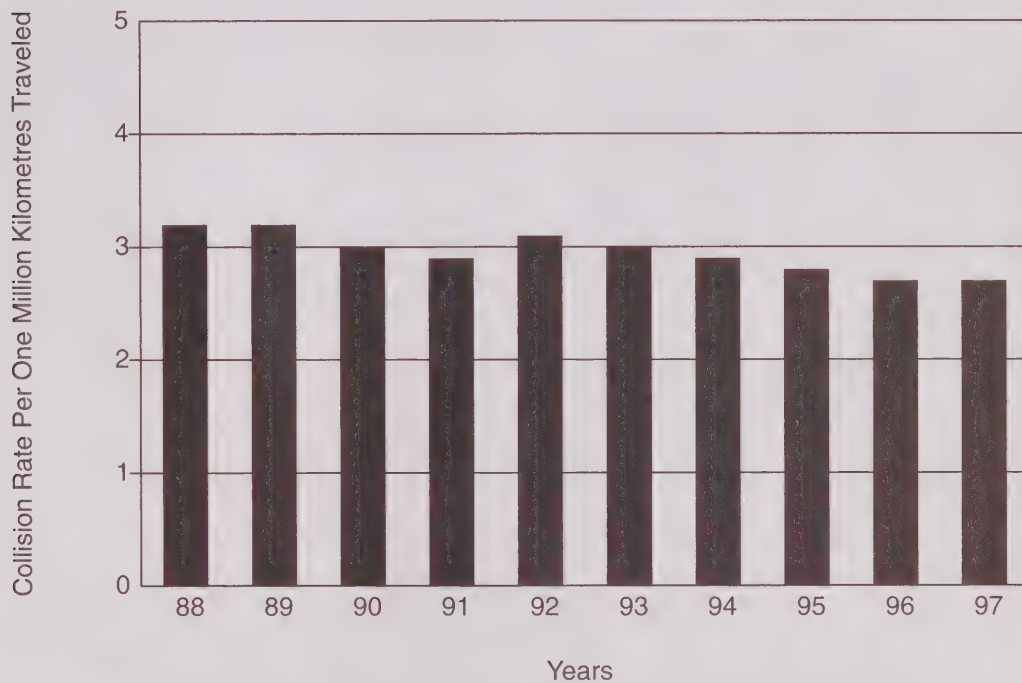
**Table 2.20 Driver Age Groups - Number Licensed, Collision Involvement and
Per Cent Involved in Collisions 1997**

Drivers Age	Drivers Licensed			Drivers Involved in Collisions*			% of Drivers of Each Age Involved in Collisions		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 16	-	-	-	273	73	346	-	-	-
16	41,104	34,633	75,737	1,161	616	1,777	2.8	1.8	2.3
17	53,017	45,706	98,723	4,632	2,612	7,244	8.7	5.7	7.3
18	57,727	49,997	107,724	5,605	3,128	8,733	9.7	6.3	8.1
19	60,062	52,266	112,328	5,680	2,935	8,615	9.5	5.6	7.7
20	62,890	55,055	117,945	5,855	2,907	8,762	9.3	5.3	7.4
21-24	266,877	239,710	506,587	22,780	12,003	34,783	8.5	5.0	6.9
25-34	843,170	768,538	1,611,708	64,129	31,685	95,814	7.6	4.1	5.9
35-44	931,966	857,144	1,789,110	57,655	30,244	87,899	6.2	3.5	4.9
45-54	720,190	640,365	1,360,555	38,767	19,482	58,249	5.4	3.0	4.3
55-64	465,498	372,108	837,606	21,593	8,657	30,250	4.6	2.3	3.6
65-74	349,965	265,214	615,179	12,571	5,330	17,901	3.6	2.0	2.9
75 & over	175,564	128,841	304,405	6,065	2,952	9,017	3.5	2.3	3.0
Unknown	-	-	-	-	-	33,001	-	-	-
Total	4,028,030	3,509,577	7,537,607	246,766	122,624	402,391	6.1	3.5	5.3

* This table excludes drivers of non-motor vehicles, i. e. bicyclists, snow vehicle operators, and ATVs etc.

3 The Collision

Collision Rate Per One Million Kilometres Traveled in Ontario - 1988 to 1997



3a. Types of Collisions

Table 3.1 Class of Collision 1988-1997

Year	Class of Collision			Total
	Fatal	Personal	Property	
		Injury	Damage	
1988	1,076	76,724	150,598	228,398
1989	1,106	77,852	168,080	247,038
1990	959	65,912	153,317	220,188
1991	956	59,242	153,471	213,669
1992	942	58,889	164,418	224,249
1993	987	58,932	168,915	228,834
1994	875	58,525	167,596	226,996
1995	860	58,273	159,952	219,085
1996	816	57,791	156,417	215,024
1997	807	56,121	164,572	221,500

**Table 3.2 Collision Rate Per One Million
Kilometers Traveled 1988-1997**

Year	Collision Rate
1988	3.2
1989	3.2
1990	3.0
1991	2.9
1992	3.1
1993	3.0
1994	2.9
1995	2.8
1996	2.7
1997	2.7

Table 3.3 Motor Vehicles Involved in Collisions Based on Initial Impact 1997*

Motor Vehicle in Collision Involving Moveable Objects:	Class of Collision			Total
	Fatal	Personal Injury	Property Damage	
Other Motor Vehicles	815	83,838	241,117	325,770
Unattended Vehicles	8	733	13,674	14,415
Pedestrian	122	4,582	158	4,862
Cyclist	22	3,035	446	3,503
Railway Train	8	21	34	63
Street Car	0	49	263	312
Farm Tractor	2	43	106	151
Animal Domestic	0	81	587	668
Animal Wild	5	413	7,347	7,765
Other Moveable Objects	1	49	214	264
Sub-total	983	92,844	263,946	357,773
Fixed Objects:				
Cable Guide Rail	2	64	373	439
Concrete Guide Rail	1	199	514	714
Steel Guide Rail	4	212	893	1,109
Pole (Utility Tower)	9	421	1,420	1,850
Pole (Sign/Parking Meter)	1	114	747	862
Fence/Noise Barrier	0	28	234	262
Culvert	0	17	48	65
Bridge Support	4	27	117	148
Rock Face	0	22	23	45
Snow Bank or Drift	2	67	298	367
Ditch	9	361	695	1,065
Curb	9	508	1,548	2,065
Crash Cushion	1	16	28	45
Building or Wall	0	35	166	201
Water Course	1	0	8	9
Construction Marker	0	12	55	67
Tree, Shrub, or Stump	5	121	391	517
Other Fixed Object	4	230	1,299	1,533
Sub-total	52	2,454	8,857	11,363
Other Events:				
Ran Off Road	122	3,679	7,505	11,306
Skidding/Sliding	158	5,762	17,111	23,031
Jackknifing	0	29	119	148
Load Spill	0	8	76	84
Fire/Explosion	1	8	435	444
Submersion	0	2	2	4
Rollover	4	234	337	575
Debris on Road	6	87	708	801
Debris off Vehicle	4	117	1,050	1,171
Other Non-Collision Event	32	1,655	4,690	6,377
Sub-total	327	11,581	32,033	43,941
Total	1,362	106,879	304,836	413,077

* Table 3.3 reflects the first event only for each vehicle in the collision.

Table 3.4 Initial Impact Type
by Class of Collision 1997

Initial Impact Type	Class of Collision			Total
	Fatal	Personal Injury	Property Damage	
Approaching	170	1,489	2,209	3,868
Angle	101	7,617	16,191	23,909
Rear End	36	15,858	37,047	52,941
Sideswipe	46	3,130	19,540	22,716
Turning Movement	69	11,536	34,058	45,663
Single Motor Vehicle Unattended	10	710	13,918	14,638
Single Motor Vehicle Other	374	15,635	39,143	55,152
Other	1	145	2,456	2,602
Unknown	0	1	10	11
Total	807	56,121	164,572	221,500

3b. Time and Environment**Table 3.5 Month of Occurrence by Class of Collision 1997**

Month of	Class of Collision						Total	%
Occurrence			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
January	63	7.8	5,158	9.2	20,117	12.2	25,338	11.4
February	60	7.4	3,735	6.7	12,823	7.8	16,618	7.5
March	61	7.6	4,090	7.3	13,497	8.2	17,648	8.0
April	52	6.4	3,720	6.6	10,211	6.2	13,983	6.3
May	71	8.8	4,728	8.4	12,121	7.4	16,920	7.6
June	70	8.7	5,205	9.3	12,810	7.8	18,085	8.2
July	72	8.9	5,054	9.0	11,952	7.3	17,078	7.7
August	91	11.3	5,027	9.0	12,085	7.3	17,203	7.8
September	69	8.6	4,729	8.4	12,304	7.5	17,102	7.7
October	79	9.8	4,877	8.7	13,980	8.5	18,936	8.5
November	63	7.8	5,102	9.1	17,128	10.4	22,293	10.1
December	56	6.9	4,696	8.4	15,544	9.4	20,296	9.2
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0

Table 3.6 Day of Week by Class of Collision 1997

Day of Occurrence	Class of Collision						Total	%
			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
Monday	95	11.8	7,534	13.4	21,928	13.3	29,557	13.3
Tuesday	91	11.3	7,906	14.1	23,102	14.0	31,099	14.0
Wednesday	99	12.3	8,180	14.6	24,299	14.8	32,578	14.7
Thursday	93	11.5	8,255	14.7	24,687	15.0	33,035	14.9
Friday	148	18.3	9,547	17.0	30,019	18.2	39,714	17.9
Saturday	143	17.7	8,412	15.0	23,763	14.4	32,318	14.6
Sunday	138	17.1	6,287	11.2	16,774	10.2	23,199	10.5
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0

Table 3.7 Hour of Occurrence by Class of Collision 1997

Hour of	Class of Collision						Total	%
Occurrence A.M.			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
12 to 1 a.m.	31	3.8	882	1.6	2,831	1.7	3,744	1.7
1 to 2 a.m.	28	3.5	853	1.5	2,529	1.5	3,410	1.5
2 to 3 a.m.	30	3.7	971	1.7	2,633	1.6	3,634	1.6
3 to 4 a.m.	33	4.1	685	1.2	1,921	1.2	2,639	1.2
4 to 5 a.m.	18	2.2	387	0.7	1,325	0.8	1,730	0.8
5 to 6 a.m.	17	2.1	428	0.8	1,628	1.0	2,073	0.9
Sub total	157	19.5	4,206	7.5	12,867	7.8	17,230	7.8
6 to 7 a.m.	20	2.5	1,069	1.9	3,443	2.1	4,532	2.0
7 to 8 a.m.	23	2.9	1,994	3.6	6,349	3.9	8,366	3.8
8 to 9 a.m.	26	3.2	3,093	5.5	9,917	6.0	13,036	5.9
9 to 10 a.m.	26	3.2	2,318	4.1	7,448	4.5	9,792	4.4
10 to 11 a.m.	33	4.1	2,400	4.3	7,546	4.6	9,979	4.5
11 to 12 noon	33	4.1	3,065	5.5	8,881	5.4	11,979	5.4
Sub total	161	20.0	13,939	24.8	43,584	26.5	57,684	26.0
Hour of								
Occurrence P.M.								
12 to 1 p.m.	33	4.1	3,346	6.0	9,595	5.8	12,974	5.9
1 to 2 p.m.	29	3.6	3,252	5.8	9,553	5.8	12,834	5.8
2 to 3 p.m.	57	7.1	3,578	6.4	9,991	6.1	13,626	6.2
3 to 4 p.m.	51	6.3	4,704	8.4	12,358	7.5	17,113	7.7
4 to 5 p.m.	39	4.8	4,736	8.4	12,973	7.9	17,748	8.0
5 to 6 p.m.	52	6.4	4,552	8.1	12,882	7.8	17,486	7.9
Sub total	261	32.3	24,168	43.1	67,352	40.9	91,781	41.4
6 to 7 p.m.	47	5.8	3,672	6.5	10,078	6.1	13,797	6.2
7 to 8 p.m.	27	3.3	2,879	5.1	7,796	4.7	10,702	4.8
8 to 9 p.m.	27	3.3	2,092	3.7	6,123	3.7	8,242	3.7
9 to 10 p.m.	46	5.7	1,959	3.5	5,775	3.5	7,780	3.5
10 to 11 p.m.	39	4.8	1,649	2.9	4,976	3.0	6,664	3.0
11 to 12 midnight	36	4.5	1,299	2.3	4,393	2.7	5,728	2.6
Sub total	222	27.5	13,550	24.1	39,141	23.8	52,913	23.9
Unknown	6	0.7	258	0.5	1,628	1.0	1,892	0.9
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0

Table 3.8 Statutory Holidays, Holiday Weekends - Fatal Collisions, Persons Killed and Injured 1997

Statutory Holiday*	Number of Fatal	Drivers		Passengers		Others		Total	
	Collisions	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Easter Weekend	12	6	10	5	11	1	0	12	21
Victoria Day	11	8	4	3	7	2	0	13	11
Canada Day	3	3	1	-	1	1	0	4	2
Civic Holiday (Simcoe Day)	15	7	12	7	13	5	3	19	28
Labour Day	17	8	7	5	9	4	1	17	17
Thanksgiving Day	13	12	7	7	18	0	0	19	25
Christmas/Boxing Day	4	1	5	6	6	0	0	7	11

* Actual length may vary depending on day holiday falls on. If holiday falls on a weekend then holiday includes the entire weekend.

Table 3.9 Light Condition by Class of Collision 1997

Light Condition	Class of Collision						Total	%
			Personal		Property			
	Fatal	%	Injury	%	Damage	%		
Daylight	424	52.5	39,434	70.3	110,210	67.0	150,068	67.8
Dawn	11	1.4	698	1.2	2,763	1.7	3,472	1.6
Dusk	20	2.5	1,784	3.2	5,619	3.4	7,423	3.4
Darkness	352	43.6	14,182	25.3	45,703	27.8	60,237	27.2
Other	0	-	23	-	277	0.2	300	0.1
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0

Table 3.10 Visibility by Class of Collision 1997

Visibility	Class of Collision						Total	%
	Personal				Property			
	Fatal	%	Injury	%	Damage	%		
Clear	627	77.7	43,197	77.0	120,682	73.3	164,506	74.3
Rain	74	9.2	6,498	11.6	18,183	11.0	24,755	11.2
Snow	70	8.7	4,615	8.2	18,722	11.4	23,407	10.6
Freezing Rain	8	1.0	622	1.1	2,592	1.6	3,222	1.5
Drifting Snow	3	0.4	470	0.8	1,680	1.0	2,153	1.0
Strong Wind	5	0.6	176	0.3	605	0.4	786	0.4
Fog, Mist, Smoke, or Dust	15	1.9	419	0.7	1,356	0.8	1,790	0.8
Other	5	0.6	124	0.2	752	0.5	881	0.4
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0

3c. The Collision Location

Table 3.11 Road Jurisdiction by Class of Collision 1997

Road Jurisdiction	Class of Collision			Total
		Personal	Property	
	Fatal	Injury	Damage	
Municipal (Excl. Twp. Rd.)	179	31,496	91,748	123,423
Provincial Highway	320	10,307	31,320	41,947
Township	77	2,328	7,152	9,557
County or District	88	2,508	6,978	9,574
Regional Municipality	139	9,334	26,868	36,341
Federal	3	108	393	504
Other	1	40	113	154
Total	807	56,121	164,572	221,500

Table 3.12 Road Jurisdiction for All Collisions 1988-1997

Road Jurisdiction	Year										Total
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
Municipal*	159,228	139,926	117,218	112,651	117,800	119,421	117,478	114,848	112,980	123,423	1,234,973
Provincial	44,772	48,944	43,513	44,234	46,537	48,275	48,895	46,365	46,867	41,947	460,349
Township	12,277	11,882	10,684	10,332	10,777	10,667	10,497	9,774	9,236	9,557	105,683
County or District	7,527	8,773	8,582	8,482	9,186	9,076	8,839	8,815	8,381	9,574	87,235
Regional Municipality*	3,620	36,237	39,004	36,956	38,810	40,230	40,165	38,279	36,738	36,341	346,380
Federal**	748	940	913	769	899	863	825	753	662	504	7,876
Other	226	336	274	245	240	302	297	251	160	154	2,485
Total	228,398	247,038	220,188	213,669	224,249	228,834	226,996	219,085	215,024	221,500	2,244,981

* Some collisions occurring on regional municipal roads were recorded as occurring on municipal roads prior to 1989.

** Since January 1, 1988 the Motor Vehicle Accident Report form allows recording of jurisdiction for federal roads.

Table 3.13 Road Location by Class of Collision 1997

Road Location	Class of Collision						Total	%
	Fatal	%	Personal Injury	%	Property Damage	%		
Non-intersection	498	61.7	20,271	36.1	66,630	40.5	87,399	39.5
Intersection Related	87	10.8	11,989	21.4	34,587	21.0	46,663	21.1
In Intersection	148	18.3	16,887	30.1	35,172	21.4	52,207	23.6
At/Near Private Drive	48	5.9	6,344	11.3	26,020	15.8	32,412	14.6
At Railway	9	1.1	93	0.2	283	0.2	385	0.2
Underpass or Tunnel	2	0.2	85	0.2	227	0.1	314	0.1
Overpass or Bridge	12	1.5	337	0.6	1,215	0.7	1,564	0.7
Other	3	0.4	115	0.2	438	0.3	556	0.3
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0

Table 3.14 Road Surface Condition by Class of Collision 1997

Road Surface Condition	Class of Collision						Total	%
	Fatal	%	Personal Injury	%	Property Damage	%		
Dry	534	66.2	36,501	65.0	97,233	59.1	134,268	60.6
Wet	143	17.7	11,686	20.8	34,396	20.9	46,225	20.9
Loose Snow	23	2.9	1,921	3.4	8,688	5.3	10,632	4.8
Slush	27	3.3	1,536	2.7	5,517	3.4	7,080	3.2
Packed Snow	26	3.2	1,404	2.5	6,835	4.2	8,265	3.7
Ice	35	4.3	2,598	4.6	10,371	6.3	13,004	5.9
Mud	0	-	11	-	93	0.1	104	-
Loose Sand or Gravel	12	1.5	288	0.5	739	0.4	1,039	0.5
Spilled Liquid	0	-	23	-	40	-	63	-
Other	7	0.9	153	0.3	660	0.4	820	0.4
Total	807	100.0	56,121	100.0	164,572	100.0	221,500	100.0

4 Place of Collision in Ontario



4. Place of Collision in Ontario

Table 4.1

Location		Estimated	Class of Collision				Persons		Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Ontario		10,302,807	221,500	807	56,121	164,572	899	85,527	6,592,484
Blind River, T		3,911	35	0	11	24	0	13	
Elliot Lake, C	M	12,387	97	0	20	77	0	31	
Sault Ste Marie, C	M	81,476	1,659	1	379	1,279	1	562	
Provincial Highway		-	625	11	163	451	16	320	
Other Areas		19,768	237	0	43	194	0	74	
Algoma		117,542	2,653	12	616	2,025	17	1,000	89,122
Brantford, C	M	81,074	1,595	2	332	1,261	2	474	
Brantford, Tp		6,241	21	0	6	15	0	14	
Burford, Tp		5,712	3	0	0	3	0	0	
Paris, T	M	8,552	82	0	17	65	0	21	
Provincial Highway		-	255	2	70	183	2	129	
Other Areas		8,066	417	6	151	260	6	237	
Brant		109,645	2,373	10	576	1,787	10	875	74,554
Amabel, Tp		3,577	2	0	0	2	0	0	
Brant, Tp		3,267	1	0	0	1	0	0	
Chesley, T		1,815	8	0	3	5	0	4	
Culross, Tp		1,647	1	0	0	1	0	0	
Kincardine, Tp		2,894	63	0	14	49	0	16	
Port Elgin, T	M	6,772	72	0	19	53	0	32	
Southampton, T	M	3,118	16	0	2	14	0	2	
Walkerton, T	M	4,735	54	0	13	41	0	17	
Warton, T		2,350	16	0	4	12	0	17	
Provincial Highway		-	213	3	43	167	4	67	
Other Areas		31,588	547	8	125	414	9	218	
Bruce		61,763	993	11	223	759	13	373	49,295

Legend

T	town	Other Areas -	Jurisdictions	M	Municipal Police Force
C	city		with less than		
VI	village		1,500 population		
Tp	township				

* Source: Ontario Ministry of Municipal Affairs Municipal Directory 1997.

Population data in this table refers to persons residing in a municipality on a permanent basis.

Table 4.1 Continued

Location		Estimated	Class of Collision				Persons		Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Cumberland, Tp		44,630	195	3	45	147	4	72	
Gloucester, C	M	106,900	997	2	227	768	2	363	
Goulbourn, Tp		19,350	181	2	44	135	3	72	
Kanata, C		49,000	584	0	117	467	0	163	
Nepean, C	M	116,000	1,404	2	356	1,046	2	544	
Osgoode, Tp		15,207	188	2	46	140	3	75	
Ottawa, C	M	317,000	6,208	7	1,510	4,691	7	2,063	
Rideau, Tp		12,106	152	1	24	127	1	37	
Rockcliffe Park, VI		2,183	11	0	2	9	0	3	
Vanier, C		17,562	286	0	56	230	0	70	
West Carleton, Tp		16,000	129	0	23	106	0	40	
Provincial Highway		-	1,524	4	361	1,159	4	575	
Other Areas		0	622	6	123	493	6	202	
Ottawa-Carleton		715,938	12,481	29	2,934	9,518	32	4,279	388,582
Cochrane, T		4,357	64	0	14	50	0	16	
Hearst, T		5,529	76	0	19	57	0	32	
Iroquois Falls, T		5,581	50	0	12	38	0	21	
Kapuskasing, T	M	9,658	94	0	22	72	0	25	
Smooth Rock Falls, T		1,877	18	0	0	18	0	0	
Timmins, C	M	45,816	693	0	192	501	0	261	
Provincial Highway		-	443	5	126	312	6	193	
Other Areas		10,689	189	2	47	140	2	76	
Cochrane		83,507	1,627	7	432	1,188	8	624	67,126
Amaranth, Tp		3,247	3	0	0	3	0	0	
East Garafraxa, Tp		2,037	2	0	0	2	0	0	
Melancthon, Tp		2,286	1	0	1	0	0	4	
Mono, Tp		5,980	3	0	1	2	0	1	
Mulmur, Tp		2,509	1	0	1	0	0	3	
Orangeville, T	M	21,373	298	1	57	240	1	80	
Shelburne, T	M	3,450	47	0	12	35	0	23	
Provincial Highway		-	252	3	61	188	6	120	
Other Areas		2,537	436	5	121	310	7	210	
Dufferin		43,419	1,043	9	254	780	14	441	32,072
Morrisburg, VI		2,362	9	0	1	8	0	1	
Winchester, Tp		3,445	10	0	2	8	0	2	
Winchester, VI		2,275	4	0	1	3	0	2	
Provincial Highway		-	169	2	44	123	2	80	(Veh. Reg.
Other Areas		11,229	194	2	37	155	2	56	included in
Dundas		19,311	386	4	85	297	4	141	Stormont)

Table 4.1 Continued

Location	Estimated	Class of Collision				Persons		Motor Vehicle
	Population	Total		Personal	Property			Registrations
	(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Ajax, T	58,854	609	0	149	460	0	228	
Brock, Tp	10,991	75	4	20	51	4	41	
Clarington	61,305	26	0	9	17	0	11	
Oshawa, C	133,500	2,214	5	594	1,615	5	878	
Pickering, T	70,733	733	0	184	549	0	271	
Scugog, Tp	17,880	154	0	43	111	0	71	
Uxbridge, Tp	14,672	212	0	51	161	0	82	
Whitby, T	67,325	953	3	250	700	4	388	
Provincial Highway	-	1,740	6	425	1,309	6	676	
Other Areas	0	951	6	242	703	8	374	
Durham	435,260	7,667	24	1,967	5,676	27	3,020	289,633
Aldborough, Tp	3,772	4	0	1	3	0	2	
Aylmer, T	M 6,275	82	0	11	71	0	21	
Bayham, Tp	4,152	1	0	0	1	0	0	
Dunwich, Tp	2,279	4	0	1	3	0	1	
Malahide, Tp	5,671	7	0	2	5	0	2	
Port Stanley, VI	2,183	14	0	2	12	0	2	
Southwold, Tp	4,431	4	0	2	2	0	4	
St Thomas, C	M 29,758	355	2	91	262	2	131	
Yarmouth, Tp	7,994	17	0	5	12	0	7	
Provincial Highway	-	345	10	112	223	11	191	
Other Areas	7,839	404	8	104	292	9	157	
Elgin	74,354	1,237	20	331	886	22	518	58,254
Amherstburg, T	M 9,905	80	0	16	64	0	26	
Anderdon, Tp	M 5,725	21	0	3	18	0	3	
Belle River, T	4,353	35	0	13	22	0	15	
Colchester South, Tp	M 5,625	4	0	0	4	0	0	
Essex, T	M 6,745	70	0	10	60	0	13	
Gosfield South, Tp	7,604	8	0	2	6	0	4	
Harrow, T	2,656	34	0	5	29	0	6	
Kingsville, T	M 5,841	45	0	10	35	0	13	
Leamington, T	M 14,982	321	0	40	281	0	50	
Maidstone, Tp	10,764	5	0	1	4	0	1	
Malden, Tp	3,220	4	0	1	3	0	2	
Mersea, Tp	M 8,787	3	0	0	3	0	0	
Rochester, Tp	4,465	2	0	0	2	0	0	
Sandwich South, Tp	6,475	5	0	1	4	0	1	
St Clair Beach, VI	M 3,669	15	0	1	14	0	1	
Tecumseh, T	11,913	112	0	20	92	0	31	
Tilbury North, Tp	3,469	2	0	0	2	0	0	
Windsor, C	M 195,627	4,544	9	1,076	3,459	10	1,547	

Table 4.1 Continued

Location	Estimated	Class of Collision				Persons		Motor Vehicle
	Population	Total		Personal	Property			Registrations
	(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Provincial Highway	-	474	9	126	339	10	252	
Other Areas	29,383	1,108	11	346	751	11	537	
Essex	341,208	6,892	29	1,671	5,192	31	2,502	224,849
Kingston, C	M 59,624	1,021	2	240	779	2	343	
Kingston, Tp	39,679	51	0	10	41	0	11	
Loughborough, Tp	4,436	3	0	0	3	0	0	
Pittsburgh, Tp	10,675	5	0	0	5	0	0	
Portland, Tp	4,529	1	0	0	1	0	0	
Storrington, Tp	3,914	1	0	0	1	0	0	
Provincial Highway	-	428	4	116	308	4	181	
Other Areas	7,866	855	4	216	635	4	321	
Frontenac	130,723	2,365	10	582	1,773	10	856	83,571
Alexandria, T	M 3,272	60	0	19	41	0	25	
Charlottenburgh, Tp	7,670	3	0	0	3	0	0	
Kenyon, Tp	3,336	1	0	0	1	0	0	
Lancaster, Tp	3,684	2	0	0	2	0	0	
Lochiel, Tp	2,921	1	0	1	0	0	1	
Provincial Highway	-	244	2	74	168	2	111	(Veh. Reg.
Other Areas	1,580	212	3	43	166	4	57	included in
Glengarry	22,463	523	5	137	381	6	194	Stormont)
Augusta, Tp	7,285	12	0	2	10	0	4	
Cardinal, VI	M 1,580	8	0	4	4	0	4	
Edwardsburg, Tp	4,566	14	0	3	11	0	3	
Kemptville, T	M 2,721	14	0	1	13	0	1	
Oxford On Rideau, Tp	6,333	4	0	1	3	0	3	
Prescott, T	M 3,999	60	0	15	45	0	20	
South Gower, Tp	2,280	1	0	0	1	0	0	
Provincial Highway	-	286	4	61	221	5	105	(Veh. Reg.
Other Areas	2,450	340	2	64	274	2	88	included in
Grenville	31,214	739	6	151	582	7	228	Leeds)
Bentick, Tp	3,396	4	0	0	4	0	0	
Durham, T	M 2,546	15	0	2	13	0	2	
Egremont, Tp	2,391	4	0	2	2	0	3	
Hanover, T	M 6,710	94	1	21	72	1	38	
Holland, Tp	2,800	3	0	0	3	0	0	
Keppel, Tp	3,751	1	0	0	1	0	0	
Meaford, T	M 4,330	39	0	10	29	0	18	
Normanby, Tp	2,550	1	0	0	1	0	0	
Owen Sound, C	M 20,399	309	2	87	220	2	135	
St Vincent, Tp	2,296	1	0	1	0	0	1	
Sullivan, Tp	2,655	1	0	1	0	0	1	

Table 4.1 Continued

Location	Estimated Population (1997)*	Class of Collision				Persons		Motor Vehicle Registrations
		Total		Personal	Property			
		Collisions	Fatal	Injury	Damage	Killed	Injured	
Sydenham, Tp	2,997	3	0	1	2	0	1	
Thornbury, T	M 1,647	11	0	1	10	0	1	
Provincial Highway	-	378	1	101	276	1	199	
Other Areas	23,492	704	4	182	518	5	253	
Grey	81,960	1,568	8	409	1,151	9	652	55,970
Delhi, Tp	15,134	180	2	45	133	2	108	
Dunnville, T	11,908	113	1	20	92	1	30	
Haldimand, T	20,824	118	0	32	86	0	55	
Nanticoke, C	22,401	201	1	51	149	1	87	
Norfolk, Tp	11,096	67	1	18	48	1	38	
Simcoe, T	15,538	271	0	54	217	0	87	
Provincial Highway	-	307	8	100	199	14	176	
Other Areas	0	382	2	94	286	2	148	
Haldimand-Norfolk	96,901	1,639	15	414	1,210	21	729	77,777
Anson, Hindon & Minden, Tp	3,160	7	0	1	6	0	2	
Dysart Et Al, Tp	4,702	4	0	0	4	0	0	
Provincial Highway	-	201	3	35	163	4	80	
Other Areas	6,033	213	0	45	168	0	68	
Haliburton	13,895	425	3	81	341	4	150	12,115
Burlington, C	128,453	1,510	5	412	1,093	5	640	
Halton Hills, T	40,173	530	3	111	416	3	169	
Milton, T	30,278	613	6	152	455	7	235	
Oakville, T	118,063	1,245	1	287	957	1	414	
Provincial Highway	-	2,131	3	472	1,656	3	776	
Other Areas	0	92	0	20	72	0	29	
Halton	316,967	6,121	18	1,454	4,649	19	2,263	229,274
Bancroft, T	2,340	54	0	16	38	0	27	
Belleville, C	M 34,954	764	1	162	601	1	239	
Deseronto, T	M 1,728	14	0	4	10	0	6	
Frankford, VI	2,012	4	0	2	2	0	3	
Hungerford, Tp	3,024	1	0	0	1	0	0	
Huntingdon, Tp	2,216	1	0	0	1	0	0	
Madoc, Tp	1,831	3	0	0	3	0	0	
Marmora Lake, Tp	2,054	3	0	0	3	0	0	
Rawdon, Tp	2,618	2	0	0	2	0	0	
Sidney, Tp	15,926	11	0	0	11	0	0	
Stirling, VI	M 1,998	16	0	6	10	0	11	
Thurlow, Tp	7,327	8	0	2	6	0	3	
Trenton, C	M 16,908	226	0	57	169	0	80	
Tyendinaga, Tp	3,201	8	0	4	4	0	5	
Provincial Highway	-	676	8	162	506	9	298	

Table 4.1

Continued

Location		Estimated	Class of Collision				Persons		Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Other Areas		13,530	800	9	192	599	9	289	
Hastings		111,667	2,591	18	607	1,966	19	961	89,051
Clinton, T	M	3,183	37	1	5	31	1	5	
Colborne, Tp		2,030	2	0	0	2	0	0	
Exeter, T	M	4,384	77	0	17	60	0	25	
Goderich, T	M	7,500	118	0	21	97	0	32	
Goderich, Tp		2,607	9	0	2	7	0	2	
Howick, Tp		3,546	2	0	1	1	0	1	
Morris, Tp		1,771	1	0	0	1	0	0	
Seaforth, T	M	2,316	19	0	1	18	0	2	
Stanley, Tp		1,613	1	0	0	1	0	0	
Stephen, Tp		4,182	2	0	1	1	0	1	
Tuckersmith, Tp		3,036	2	0	0	2	0	0	
Turnberry, Tp		1,739	3	0	1	2	0	1	
Wingham, T	M	2,921	32	0	5	27	0	9	
Provincial Highway		-	265	1	69	195	1	130	
Other Areas		18,451	471	9	120	342	10	207	
Huron		59,279	1,041	11	243	787	12	415	40,609
Dryden, T	M	6,300	100	0	10	90	0	17	
Ignace, Tp		1,770	5	0	1	4	0	1	
Jaffray Melick, T		4,012	21	0	1	20	0	1	
Keewatin, T		1,994	25	0	3	22	0	4	
Kenora, T	M	9,715	195	0	23	172	0	34	
Red Lake, Tp		2,061	5	0	0	5	0	0	
Sioux Lookout, T		3,400	44	0	8	36	0	8	
Provincial Highway		-	677	9	141	527	10	227	
Other Areas		6,582	210	0	49	161	0	68	
Kenora		35,834	1,282	9	236	1,037	10	360	38,996
Blenheim, T		4,567	55	0	5	50	0	7	
Camden, Tp		2,067	1	0	0	1	0	0	
Chatham, C	M	43,555	774	2	202	570	2	276	
Chatham, Tp		6,059	4	0	2	2	0	2	
Harwich, Tp		6,116	5	0	0	5	0	0	
Howard, Tp		2,249	2	0	2	0	0	3	
Raleigh, Tp		5,209	4	0	1	3	0	1	
Ridgetown, T		3,234	27	0	9	18	0	15	
Romney, Tp		1,946	1	0	0	1	0	0	
Tilbury East, Tp		2,282	2	0	1	1	0	2	
Tilbury, T	M	4,254	53	0	8	45	0	14	
Wallaceburg, T	M	10,992	116	0	22	94	0	33	
Wheatley, VI		1,557	12	0	2	10	0	2	

Table 4.1 Continued

Location	Estimated	Class of Collision				Persons		Motor Vehicle
	Population	Total		Personal	Property			Registrations
	(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Provincial Highway	-	312	8	98	206	9	186	
Other Areas	11,708	488	7	136	345	8	228	
Kent	105,795	1,856	17	488	1,351	19	769	80,000
Bosanquet, Tp	4,899	18	1	6	11	1	7	
Brooke, Tp	1,877	1	0	0	1	0	0	
Enniskillen, Tp	3,159	6	0	1	5	0	3	
Forest, T	2,795	25	0	5	20	0	6	
Moore, Tp	10,684	2	0	0	2	0	0	
Petrolia, T	M 4,809	45	0	6	39	0	8	
Plympton, Tp	5,116	2	0	1	1	0	1	
Point Edward, VI	M 2,277	15	0	8	7	0	13	
Sarnia, C	M 69,657	1,047	3	235	809	5	348	
Wyoming, VI	2,077	12	0	6	6	0	10	
Provincial Highway	-	270	3	82	185	3	127	
Other Areas	14,790	487	9	151	327	9	246	
Lambton	122,140	1,930	16	501	1,413	18	769	87,863
Bathurst, Tp	2,971	1	0	1	0	0	1	
Beckwith, Tp	4,689	1	0	0	1	0	0	
Carleton Place, T	M 7,483	71	0	15	56	0	19	
Drummond, Tp	2,866	3	0	0	3	0	0	
Mississippi Mills, T	10,235	30	0	9	21	0	10	
Montague, Tp	3,557	2	0	0	2	0	0	
Perth, T	M 5,524	143	0	31	112	0	47	
Smiths Falls, T	M 9,001	213	0	41	172	0	60	
Provincial Highway	-	278	2	59	217	2	108	
Other Areas	8,958	483	4	73	406	5	122	
Lanark	55,284	1,225	6	229	990	7	367	41,063
Bastard & S Burgess, Tp	2,508	3	0	2	1	0	2	
Brockville, C	M 21,103	393	0	80	313	0	110	
Elizabethtown, Tp	7,497	7	0	2	5	0	2	
F Leeds & Lansdowne, Tp	4,798	11	0	2	9	0	2	
Front Of Yonge, Tp	2,337	4	0	2	2	0	3	
Gananoque, T	M 4,973	78	1	14	63	1	17	
Kitley, Tp	2,236	1	0	0	1	0	0	
R Leeds & Lansdowne, Tp	2,689	1	0	0	1	0	0	
Rear Of Yonge & Escott, Tp	1,883	4	0	0	4	0	0	
South Crosby, Tp	1,771	2	0	0	2	0	0	
South Elmsley, Tp	3,312	1	0	0	1	0	0	
Provincial Highway	-	421	7	111	303	9	206	
Other Areas	4,056	409	1	113	295	1	153	
Leeds	59,163	1,335	9	326	1,000	11	495	66,979

Table 4.1 Continued

Location		Estimated	Class of Collision				Persons		Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Ernestown, Tp		12,177	6	0	1	5	0	1	
N Fredericksburgh, Tp		3,095	1	0	0	1	0	0	
Napanee, T		4,955	122	0	31	91	0	49	
Provincial Highway		-	301	6	70	225	6	105	
Other Areas		16,096	292	2	74	216	2	111	
Lennox & Addington		36,323	722	8	176	538	8	266	24,106
Provincial Highway		-	194	0	38	156	0	53	
Other Areas		7,279	159	0	41	118	0	55	
Manitoulin		7,279	353	0	79	274	0	108	9,623
Adelaide, Tp		2,000	2	0	0	2	0	0	
Biddulph, Tp		2,194	4	0	0	4	0	0	
Caradoc, Tp		6,117	5	0	2	3	0	2	
Delaware, Tp		2,465	2	0	2	0	0	2	
Ekfrid, Tp		2,202	3	0	1	2	0	2	
Glencoe, VI		2,054	15	0	3	12	0	3	
Lobo, Tp		5,464	9	0	2	7	0	4	
London, C	M	325,437	7,144	17	2,303	4,824	17	3,412	
London, Tp		4,741	10	0	3	7	0	4	
Lucan, VI		1,950	7	0	2	5	0	2	
Mcgillivray, Tp		1,843	1	0	0	1	0	0	
North Dorchester, Tp		8,144	14	0	4	10	0	5	
Strathroy, T	M	10,981	90	0	16	74	0	21	
West Nissouri, Tp		3,524	3	0	2	1	0	3	
Provincial Highway		-	632	4	160	468	5	265	
Other Areas		8,008	766	15	226	525	16	393	
Middlesex		387,124	8,707	36	2,726	5,945	38	4,118	242,303
Bracebridge, T		14,100	155	0	20	135	0	29	
Gravenhurst, T		8,941	85	0	20	65	0	28	
Huntsville, T		18,000	130	0	24	106	0	30	
Lake Of Bays, Tp		2,588	5	0	2	3	0	2	
Muskoka Lakes, Tp		5,715	33	0	7	26	0	8	
Provincial Highway		-	649	10	153	486	12	252	
Other Areas		2,074	319	1	60	258	1	88	
Muskoka		51,418	1,376	11	286	1,079	13	437	38,438
Fort Erie, T		26,221	406	3	107	296	3	160	
Grimsby, T		18,925	235	0	70	165	0	97	
Lincoln, T		19,000	208	2	45	161	2	76	
Niagara Falls, C		76,895	151	0	40	111	0	69	
Niagara On The Lake, T		12,695	1,632	5	382	1,245	6	572	
Pelham, T		13,956	155	0	32	123	0	54	
Port Colborne, C		18,389	223	0	56	167	0	85	

Table 4.1

Continued

Location		Estimated	Class of Collision			Persons		Motor Vehicle
		Population	Total		Personal	Property		Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured
St Catharines, C		130,000	2,113	3	438	1,672	3	647
Thorold, C		18,000	185	2	41	142	2	66
Wainfleet, Tp		6,139	43	0	8	35	0	12
Welland, C		47,423	824	2	186	636	3	287
West Lincoln, Tp		11,060	100	1	41	58	1	65
Provincial Highway		-	1,459	12	414	1,033	13	714
Other Areas		0	428	4	94	330	5	142
Niagara		398,703	8,162	34	1,954	6,174	38	3,046
Caldwell, Tp		1,569	1	0	0	1	0	0
East Ferris, Tp		4,153	3	0	0	3	0	0
Mattawa, T		2,472	29	0	3	26	0	3
North Bay C	M	56,000	722	1	170	551	1	234
Springer, Tp		2,434	3	0	1	2	0	2
Sturgeon Falls, T	M	6,161	102	1	14	87	1	24
Provincial Highway		-	582	8	155	419	10	253
Other Areas		5,752	193	0	40	153	0	58
Nipissing		80,568	1,635	10	383	1,242	12	574
Brighton, Tp		3,418	2	0	1	1	0	1
Brighton, T		4,199	30	0	6	24	0	9
Campbellford, T		3,305	36	0	8	28	0	9
Cobourg, T	M	15,037	208	0	57	151	0	81
Colborne, VI		1,971	5	0	0	5	0	0
Cramahe, Tp		3,060	1	0	0	1	0	0
Haldimand, Tp		4,131	3	0	0	3	0	0
Hamilton, Tp		9,470	8	0	0	8	0	0
Hope, Tp		3,612	2	0	2	0	0	9
Murray, Tp		6,841	6	0	1	5	0	1
Percy, Tp		3,082	2	0	0	2	0	0
Port Hope, T	M	11,040	106	0	22	84	0	30
Seymour, Tp		4,226	3	0	0	3	0	0
Provincial Highway		-	544	6	179	359	6	368
Other Areas		2,079	476	4	142	330	4	239
Northumberland		75,471	1,432	10	418	1,004	10	747
Blandford-Blenheim, Tp		7,157	1	0	1	0	0	2
East Zorra-Tavistock, Tp		7,370	2	0	2	0	0	4
Ingersoll, T	M	9,545	100	0	23	77	0	31
Norwich, Tp	M	10,302	25	0	6	19	0	11
S West Oxford, Tp		8,427	5	0	1	4	0	1
Tillsonburg, T	M	12,729	162	0	37	125	0	54
Woodstock, C	M	31,252	614	0	159	455	0	223
Zorra, Tp		8,182	3	0	0	3	0	0

Table 4.1 Continued

Location		Estimated	Class of Collision				Persons		Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Provincial Highway		-	497	9	121	367	12	231	
Other Areas		0	536	11	144	381	13	278	
Oxford		94,964	1,945	20	494	1,431	25	835	69,373
Himsworth North, Tp		2,993	1	0	0	1	0	0	
Mcdougall, Tp		2,162	5	0	3	2	0	4	
Perry, Tp		2,023	2	0	1	1	0	1	
Provincial Highway		-	634	9	173	452	10	320	
Other Areas		26,436	366	1	78	287	1	110	
Parry Sound		33,614	1,008	10	255	743	11	435	34,642
Brampton, C		278,160	3,926	5	812	3,109	5	1,276	
Caledon, T		39,832	736	5	155	576	5	227	
Mississauga, C		559,000	7,482	18	1,349	6,115	20	1,989	
Provincial Highway		-	3,261	9	659	2,593	9	1,043	
Other Areas		0	410	0	33	377	0	45	
Peel		876,992	15,815	37	3,008	12,770	39	4,580	537,905
Listowel, T	M	5,262	62	0	12	50	0	15	
Mitchell, T		3,518	41	0	12	29	0	17	
St Marys, T	M	5,493	50	0	8	42	0	11	
Stratford, C	M	28,700	563	0	130	433	0	201	
Provincial Highway		-	259	2	69	188	3	124	
Other Areas		27,896	411	4	105	302	5	189	
Perth		70,869	1,386	6	336	1,044	8	557	48,195
Belmont & Methuen, Tp		2,877	1	0	0	1	0	0	
Cavan, Tp		5,344	3	0	1	2	0	1	
Douro, Tp		3,524	3	0	1	2	0	1	
Dummer, Tp		2,847	4	0	0	4	0	0	
Ennismore, Tp		4,239	1	0	0	1	0	0	
Harvey, Tp		3,059	2	0	1	1	0	1	
Lakefield, VI		2,387	26	1	5	20	1	8	
Otonabee, Tp		5,060	3	0	1	2	0	1	
Peterborough, C	M	66,494	927	4	318	605	4	453	
Smith, Tp		8,692	10	0	4	6	0	4	
Provincial Highway		-	418	4	110	304	5	177	
Other Areas		11,401	603	1	181	421	1	276	
Peterborough		115,924	2,001	10	622	1,369	11	922	83,229
Alfred & Plantagenet, Tp		4,004	7	0	3	4	0	3	
Hawkesbury, T	M	9,871	216	0	32	184	0	38	
E Hawkesbury, Tp		3,153	3	0	1	2	0	1	
W Hawkesbury, Tp		2,957	6	0	3	3	0	3	
L'Orignal, VI		1,971	6	0	2	4	0	2	
Russell, Tp		11,417	5	0	1	4	0	3	

Table 4.1 Continued

Location		Estimated	Class of Collision				Persons		Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Vankleek Hill, T		1,941	18	0	2	16	0	3	
Provincial Highway		-	194	2	61	131	2	112	
Other Areas		4,252	229	1	83	145	1	121	
Prescott		49,699	684	3	188	493	3	286	58,456
Ameliasburg, Tp		5,235	2	0	0	2	0	0	
Hallowell, Tp		4,101	3	0	0	3	0	0	
Hillier, Tp		1,700	1	0	0	1	0	0	
Picton, T		4,077	67	0	5	62	0	5	
Provincial Highway		-	98	2	27	69	2	49	
Other Areas		7,633	261	2	60	199	2	83	
Prince Edward		22,746	432	4	92	336	4	137	17,846
Atikokan, Tp	M	3,632	15	0	0	15	0	0	
Fort Frances, T	M	8,514	156	0	31	125	0	46	
Provincial Highway		-	199	4	43	152	5	68	
Other Areas		6,429	91	0	6	85	0	12	
Rainy River		18,575	461	4	80	377	5	126	17,700
Alice & Fraser, Tp		3,955	1	0	0	1	0	0	
Arnprior, T		6,376	93	0	16	77	0	26	
Deep River, T	M	4,278	11	0	1	10	0	1	
Horton, Tp		2,325	3	0	1	2	0	2	
Mcnab, Tp		5,523	3	0	1	2	0	1	
Pembroke, C	M	13,445	259	0	60	199	0	80	
Petawawa, Tp		8,430	1	0	0	1	0	0	
Petawawa, VI		6,016	18	0	5	13	0	5	
Renfrew, T	M	7,665	87	0	22	65	0	30	
Westmeath, Tp		2,442	1	0	0	1	0	0	
Wilberforce, Tp		1,796	3	0	0	3	0	0	
Provincial Highway		-	552	10	133	409	12	250	
Other Areas		28,350	548	3	130	415	3	203	
Renfrew		90,601	1,580	13	369	1,198	15	598	68,082
Cambridge, Tp		6,002	3	0	0	3	0	0	
Clarence, Tp		10,069	5	0	2	3	0	3	
Provincial Highway		-	118	0	34	84	0	55	(Veh. Reg.
Other Areas		1,441	73	0	11	61	1	14	included in
Russell		17,512	199	0	47	151	1	72	Prescott)
Adjala-Tosorontio, Tp		8,896	6	0	3	3	0	6	
Barrie, C	M	71,413	1,596	3	271	1,322	6	405	
Bradford W Gwillimbury, T	M	18,222	244	1	60	183	1	97	
Collingwood, T	M	14,673	279	0	63	216	0	83	
Essa, Tp		15,745	14	0	2	12	0	2	
Innisfil, T	M	22,523	188	0	43	145	0	72	

Table 4.1 Continued

Location		Estimated	Class of Collision				Persons		Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Midland, T	M	14,284	270	0	66	204	0	112	
New Tecumseth, T		20,767	178	0	31	147	0	42	
Orillia, C		27,384	517	0	100	417	0	153	
Oro-Medonite, Tp		15,516	4	0	0	4	0	0	
Penetanguishene, T	M	6,948	78	0	10	68	0	13	
Tay, Tp		10,058	10	0	3	7	0	3	
Tiny, Tp		8,204	7	0	2	5	0	5	
Wasaga Beach, T		7,463	152	1	44	107	1	73	
Provincial Highway		-	1,952	12	423	1,517	15	783	
Other Areas		43,406	1,815	12	445	1,358	14	732	
Simcoe		305,502	7,310	29	1,566	5,715	37	2,581	232,875
Cornwall, C	M	46,802	766	2	189	575	2	278	
Provincial Highway		-	214	1	59	154	1	100	
Other Areas		441	185	2	41	142	2	57	
Stormont		64,384	1,165	5	289	871	5	435	72,194
Capreol, T		3,621	31	0	9	22	0	10	
Espanola, T		5,144	40	1	10	29	1	14	
Nickel Centre, T		12,129	70	0	24	46	0	38	
Onaping Falls, T		5,068	11	0	4	7	0	4	
Rayside-Balfour, T		15,039	77	1	21	55	1	26	
Sudbury, C	M	87,087	1,773	4	458	1,311	4	680	
Valley East, T		22,102	170	3	63	104	3	114	
Walden, T		9,753	54	1	15	38	1	26	
Provincial Highway		-	733	11	222	500	11	408	
Other Areas		11,885	509	0	132	377	0	206	
Sudbury		171,828	3,468	21	958	2,489	21	1,526	129,642
Geraldton, T		2,578	26	0	5	21	0	6	
Longlac, T		1,833	18	0	2	16	0	3	
Manitouwadge, Tp		3,554	12	1	1	10	1	2	
Marathon, T	M	4,702	24	0	4	20	0	6	
Nipigon, Tp		2,095	6	0	0	6	0	0	
Oliver, Tp		2,488	1	0	0	1	0	0	
Paipoonge, Tp		3,064	2	0	2	0	0	3	
Schreiber, Tp		1,762	4	0	0	4	0	0	
Shuniah, Tp		2,144	4	0	2	2	0	4	
Terrace Bay, Tp		2,309	13	0	2	11	0	3	
Thunder Bay, C	M	113,562	2,075	1	447	1,627	1	647	
Provincial Highway		-	877	16	203	658	16	341	
Other Areas		8,962	305	1	47	257	1	80	
Thunder Bay		149,053	3,367	19	715	2,633	19	1,095	116,196

Table 4.1 Continued

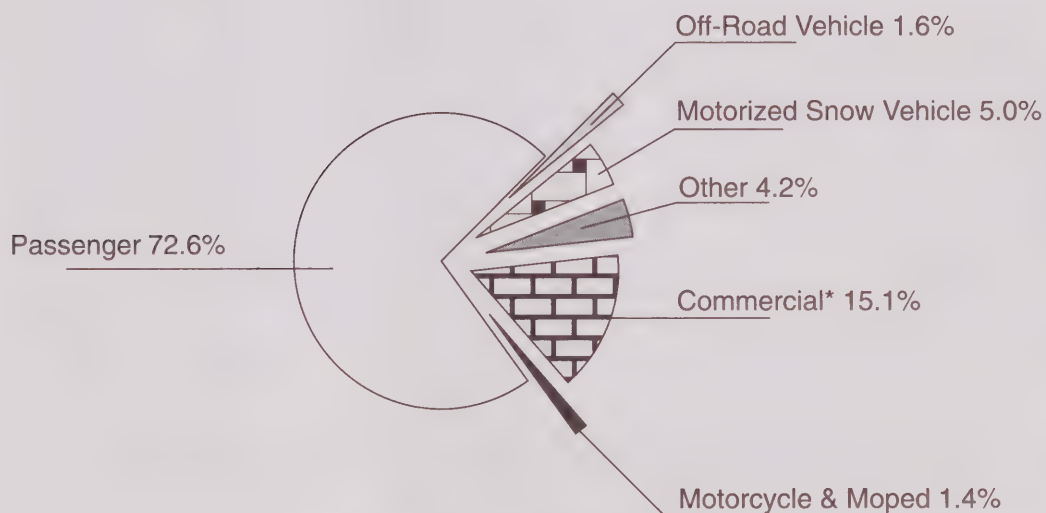
Location		Estimated	Class of Collision				Persons		Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Englehart, T		1,655	12	0	2	10	0	4	
Haileybury, T		4,666	48	0	5	43	0	7	
Kirkland Lake, T	M	10,330	115	0	24	91	0	37	
New Liskeard, T	M	4,986	96	0	17	79	0	25	
Provincial Highway		-	300	3	77	220	3	136	
Other Areas		12,372	134	0	32	102	0	45	
Timiskaming		34,009	705	3	157	545	3	254	27,427
East York, Borough		98,594	1,021	2	314	705	2	457	
Etobicoke, C		309,993	5,322	3	1,594	3,725	3	2,410	
North York, C		557,869	13,486	11	3,992	9,483	11	6,214	
Scarborough, C		507,680	10,667	18	3,520	7,129	18	5,292	
Toronto, C		635,395	24,164	35	6,451	17,678	36	8,867	
York, C		138,080	856	0	305	551	0	485	
Provincial Highway		-	7,706	17	2,091	5,598	18	3,218	
Other Areas		0	0	0	0	0	0	0	
Toronto, Metro	M	2,247,611	63,222	86	18,267	44,869	88	26,943	1,103,814
Bobcaygeon, VI		2,472	15	0	3	12	0	4	
Eldon, Tp		2,804	1	0	1	0	0	1	
Emily, Tp		6,254	2	0	0	2	0	0	
Fenelon Falls, VI		1,806	19	0	3	16	0	3	
Lindsay, T	M	17,000	280	0	67	213	0	91	
Manvers, Tp		5,157	4	0	0	4	0	0	
Mariposa, Tp		6,839	2	0	1	1	0	4	
Somerville, Tp		2,092	6	0	2	4	0	2	
Verulam, Tp		5,075	5	0	1	4	0	1	
Provincial Highway		-	429	5	111	313	5	192	
Other Areas		15,003	620	7	153	460	7	227	
Victoria		64,502	1,383	12	342	1,029	12	525	51,478
North Dumfries, Tp		7,090	108	3	22	83	4	32	
Cambridge, C		99,000	1,849	3	397	1,449	3	591	
Kitchener, C		183,200	3,493	9	748	2,736	9	1,092	
Waterloo, C		89,663	1,504	3	325	1,176	5	474	
Wellesley, Tp		8,370	37	0	12	25	0	18	
Wilmot, Tp		13,135	123	0	25	98	0	41	
Woolwich, Tp		16,711	242	1	70	171	1	112	
Provincial Highway		-	1,005	5	214	786	5	335	
Other Areas		0	331	2	85	244	2	120	
Waterloo		417,169	8,692	26	1,898	6,768	29	2,815	254,622
Arthur, Tp		2,472	4	0	3	1	0	7	
Arthur, VI		1,960	23	0	3	20	0	3	
Elora, VI		3,116	17	0	3	14	0	6	

Table 4.1 Continued

Location		Estimated	Class of Collision				Persons		Motor Vehicle
		Population	Total		Personal	Property			Registrations
		(1997)*	Collisions	Fatal	Injury	Damage	Killed	Injured	
Eramosa, Tp		5,764	5	0	1	4	0	1	
Erin, Tp		7,468	10	0	0	10	0	0	
Erin, VI		2,414	12	0	3	9	0	3	
Fergus, T	M	8,008	89	0	25	64	0	34	
West Garafraxa, Tp		3,341	3	0	1	2	0	1	
Guelph, C	M	93,400	1,229	3	416	810	3	651	
Guelph, Tp		3,045	7	0	1	6	0	1	
Harriston, T	M	1,900	16	0	5	11	0	5	
Maryborough, Tp		2,573	1	0	1	0	0	1	
Minto, Tp		2,357	4	0	0	4	0	0	
Mount Forest, T		4,164	49	0	9	40	0	10	
Nichol, Tp		3,999	7	0	1	6	0	1	
Palmerston, T	M	2,400	13	0	3	10	0	4	
Peel, Tp		4,294	7	0	1	6	0	1	
Pilkington, Tp		2,400	1	0	0	1	0	0	
Puslinch, Tp		4,607	7	0	0	7	0	0	
Provincial Highway		-	890	8	231	651	11	388	
Other Areas		3,169	882	3	200	679	3	319	
Wellington		162,851	3,276	14	907	2,355	17	1,436	114,904
Ancaster, T		22,810	215	0	69	146	0	115	
Dundas, T		22,154	159	0	58	101	0	85	
Flamborough, T		33,381	208	2	73	133	2	108	
Glanbrook, Tp		10,238	70	0	28	42	0	52	
Hamilton, C		318,500	4,450	11	1,620	2,819	11	2,429	
Stoney Creek, C		51,865	407	1	160	246	1	230	
Provincial Highway		-	1,190	12	366	812	15	647	
Other Areas		0	114	1	31	82	1	40	
Hamilton-Wentworth		458,948	6,813	27	2,405	4,381	30	3,706	268,028
Aurora, T		33,595	397	0	72	325	0	111	
E Gwillimbury, T		18,023	300	1	83	216	1	142	
Georgina, T		30,802	299	9	83	207	12	145	
King, Tp		17,504	258	3	62	193	3	103	
Markham, T		164,376	2,640	4	393	2,243	4	614	
Newmarket, T		49,645	684	1	118	565	1	178	
Richmond Hill, T		100,000	1,230	1	189	1,040	1	292	
Vaughan, C		131,720	2,072	4	391	1,677	4	607	
Whitchurch-Stouffville , T		18,500	233	1	64	168	1	106	
Provincial Highway		-	3,146	15	499	2,632	17	787	
Other Areas		0	703	3	129	571	3	190	
York		564,165	11,962	42	2,083	9,837	47	3,275	398,146

5 The Vehicle

Vehicle Population by Vehicle Class in Ontario - 1997



Other includes bus, school bus, road building machinery, permanent apparatus and farm trucks.

* Commercial excludes Single Application Vehicle Registration (SAVR - 27,295 vehicles).

5a. Vehicles in Collisions**Table 5.1 Type of Vehicle Involved in All Collisions 1997**

Type of Vehicle	Class of Collision			Total
	Fatal	Personal	Property	
		Injury	Damage	
Passenger Car	778	76,492	211,424	288,694
Passenger Car & Trailer	1	122	465	588
Truck	362	21,900	70,852	93,114
Truck & Trailer	27	507	1,937	2,471
Tractor & Semi-trailer	91	1,303	5,173	6,567
Motorcycle	41	1,151	436	1,628
Bus	7	619	1,633	2,259
School Bus/Vehicle	5	234	905	1,144
Other - Or Not Known	7	1,016	10,391	11,414
Non Motor Vehicle	43	3,535	1,620	5,198
Total	1,362	106,879	304,836	413,077

In 1988, major revisions were made in the recording of motor vehicle collision data. The above table now reflects a consolidation of various types of vehicles and/or trailers. Therefore, valid conclusions cannot be made when comparing these data to those of the years previous to 1988.

More detailed information for some vehicles is provided in the Vehicles of Special Interest Section.

Table 5.2 Condition of Vehicle by
Class of Collision 1997

Condition of Vehicle	Class of Collision			Total
	Personal		Property	
	Fatal	Injury	Damage	
No Apparent Defect	1,258	100,991	271,576	373,825
Service Brakes Defective	9	170	258	437
Steering Defective	0	17	33	50
Tire Puncture or Blow Out	1	59	152	212
Tire Tread Insufficient	6	38	60	104
Headlamps Defective	1	7	17	25
Other Lamps or Reflectors Defective	0	24	62	86
Engine Controls Defective	0	15	55	70
Wheels or Suspension Defective	0	11	87	98
Vision Obscured	0	9	26	35
Trailer Hitch Defective	0	2	6	8
Other Defects	19	665	5,182	5,866
Unknown	68	4,871	27,322	32,261
Total	1,362	106,879	304,836	413,077

Table 5.3 Model Year of Vehicle by Class of
Collision 1997

Model Year of Vehicle	Class of Collision			Total
	Personal		Property	
	Fatal	Injury	Damage	
1998	13	610	2,088	2,711
1997	90	6,083	18,357	24,530
1996	76	6,294	18,916	25,286
1995	96	7,475	22,905	30,476
1994	83	6,781	20,409	27,273
1993	91	6,793	20,842	27,726
1992	94	7,285	21,013	28,392
1991	67	7,247	20,687	28,001
1990	116	7,919	22,556	30,591
1989	103	8,646	24,458	33,207
1988 and earlier	484	35,524	94,349	130,357
Unknown	49	6,222	18,256	24,527
Total	1,362	106,879	304,836	413,077

Table 5.4 Insurance Status of Vehicle by Class of Collision 1997

Insurance	Class of Collision			Total
		Personal	Property	
	Fatal	Injury	Damage	
Insured	1,250	98,258	278,716	378,224
Not Insured	48	2,424	2,623	5,095
Unknown	64	6,197	23,497	29,758
Total	1,362	106,879	304,836	413,077

5b. Putting the Vehicle in Context

Table 5.5 **Vehicle Population by
Type of Vehicle 1997**

Vehicle Class	
Passenger	5,222,698
Motorcycle	94,886
Moped	3,154
Commercial*	1,087,832
Bus	18,915
School Bus	8,378
Motorized Snow Vehicle	362,561
Off-Road Vehicle	117,438
Road Building Machinery	691
Permanent Apparatus	3,322
Farm Trucks	35,170
Total	6,955,045

Table 5.6 **Selected Types of Vehicles by Model Year 1997**

Vehicle Class	Model Years											Total
	98	97	96	95	94	93	92	91	90	89	88+	
Passenger	122,903	388,086	305,512	363,672	340,837	358,124	386,679	369,586	387,009	409,635	1,790,655	5,222,698
Motorcycle	437	3,491	3,326	2,723	2,603	2,805	2,332	2,100	2,283	2,462	70,324	94,886
Moped	6	7	7	4	18	12	4	13	13	20	3,050	3,154
Commercial*	25,426	79,856	56,942	72,550	67,523	54,716	55,885	56,516	76,367	92,656	488,578	1,127,015
Bus	213	1,599	2,069	1,971	1,380	1,590	2,032	2,150	2,534	2,480	9,275	27,293
Motorized Snow Vehicle	11,374	16,490	15,186	14,573	14,590	12,304	9,713	13,360	14,639	14,041	226,291	362,561
Off-Road Vehicle	1,512	4,075	5,222	5,218	4,287	5,185	4,886	4,922	5,741	4,702	71,688	117,438
Total	161,871	493,604	388,264	460,711	431,238	434,736	461,531	448,647	488,586	525,996	2,659,861	6,955,045

* Excludes Single Application Vehicle Registrations (SAVR - 27,295 vehicles).

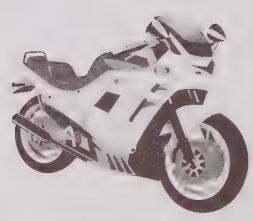
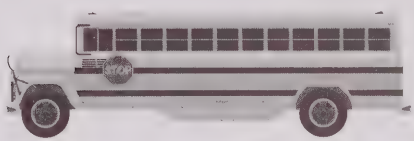
Table 5.7 Vehicle Damage Level 1997

Damage	Class of Collision			Total
	Fatal	Personal	Property	
		Injury	Damage	
None	69	10,171	20,183	30,423
Light	137	29,831	127,824	157,792
Moderate	132	28,996	95,583	124,711
Severe	232	22,484	27,796	50,512
Demolished	733	10,386	5,135	16,254
Unknown	59	5,011	28,315	33,385
Total	1,362	106,879	304,836	413,077

Vehicle Damage

None	No visible damage.
Light	Slight or superficial damage. Includes scratches, small dents, and minor cracks in glass, that do not affect safety or performance of vehicle.
Moderate	Unsafe conditions result from damage. Vehicle must be repaired to make its condition meet the requirements of the law. Vehicle can be driven off road or a limited distance, but doing so would be unsafe.
Severe	Vehicle cannot be driven. Requires towing. Would normally be repaired.
Demolished	Vehicle damaged to the extent that repairs would not be acceptable.

6 Vehicles of Special Interest



6a. Motorcycles**Table 6.1 Motorcyclists*****Killed and Injured****1993-1997**

Year	Drivers		Passengers	
	Killed	Injured	Killed	Injured
1993	54	1,706	5	398
1994	50	1,526	4	324
1995	37	1,309	4	289
1996	27	1,006	2	244
1997	36	993	2	255

* Excludes moped drivers and passengers.

Table 6.2 Selected Factors**Relevant to Fatal Motorcycle****Collisions 1997**

Factors (not mutually exclusive)	%
Unlicensed Motorcycle Drivers	8
Under 25 years Old	33
Alcohol Used	
Ability Impaired Alcohol > .08	18
Had Been Drinking	3
Unknown	10
Helmet Not Worn (Fatalities)	8
Motorcycle Driver Error	
Speed Too Fast/Lost Control	50
Other Error	5
Single Vehicle Collisions	31
Day/Night	56/44
Weekend	36

6b. School Vehicles**Table 6.3 Pupils Transported Daily, Total Collisions and Injury Rate per 100,000 Pupils -
School Years 1992/93-1996/97**

	School Year	Pupils	Total	Injury Rate per 100,000 Pupils	
		Transported	Number of		
		Daily*	Collisions	Fatals	Non-Fatal
	1992/93	796,347	1,174	-	20
	1993/94	798,926	1,293	0.4	27
	1994/95	816,273	1,018	0.1	21
	1995/96	Not Available	1,091	Not Available	Not Available
	1996/97	Not Available	1,046	Not Available	Not Available

* Since the 1995/96 school year these numbers are no longer available.

**Table 6.4 School Vehicle Type by Nature of
Collision 1996/97**

School Vehicle Type	Nature of Collision				Total	Five Year Total
	Fatal	Pupil Injury	Non-Pupil Injury	Property Damage	Number of Collisions	(1992/93 1996/97)
School Bus	4	54	101	745	904	4,883
School Van	0	10	11	70	91	583
Other School Vehicles	0	5	5	41	51	156
Total	4	69	117	856	1,046	5,622

Table 6.5 Pupil Injury by Collision Event and Vehicle Type 1996/97 (Number of Persons)

School Vehicle Type	Collision Event						Total		Five Year Total	
	Crossing		Within		Other				(1992/93 1996/97)	
	Road		School Vehicle							
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
School Bus	1	0	0	121	1	3	2	124	6	740
School Van	0	0	0	7	0	1	0	8	0	57
Other School Vehicles	0	0	0	2	0	0	0	2	0	11
Total	1	0	0	130	1	4	2	134	6	808

6c. Trucks**Table 6.6 Class of Truck Collision**
- Number of Trucks 1993-1997

Year	Class of Collision			Total
	Fatal	Personal Injury	Property Damage	
1993	419	13,312	42,915	56,646
1994	326	13,335	43,906	57,567
1995	365	12,647	40,487	53,499
1996	320	12,377	39,595	52,292
1997	342	12,062	38,519	50,923
Total	1,772	63,733	205,422	270,927

Table 6.7 Driver Licence Class Required
by Class of Truck Collision
- Number of Trucks 1997

Driver Licence Required	Class of Collision			Total
	Fatal	Personal Injury	Property Damage	
G	207	10,062	31,024	41,293
D	33	599	2,475	3,107
A*	102	1,401	5,020	6,523
Total	342	12,062	38,519	50,923

* Includes truck/trailer combinations requiring a Class "A" licence.

Table 6.8 Driver Licence Class Required -
Truck in Collisions, Registered Trucks
and Collision Rate 1997

Driver Licence Required	Trucks in Collisions	Registered Trucks	Truck Involvement*
G	41,293	984,355	4.2
D	3,107	49,580	6.3
A**	6,523	120,375 ***	5.4
Total	50,923	1,154,310	4.4

* Number of trucks in collisions per 100 registered trucks.

** Tractor/trailer combination only.

***Includes vehicles registered under SAVR - 27,295.

Table 6.9 Selected Factors Relevant to Fatal
Truck Collisions 1997

Factors in	Driver Licence Required		
Fatal Collisions:	Class G	Class D	Class A
Drivers			
Alcohol Involved	24.2%	-	1.0%
Driving Properly	45.4%	63.6%	71.6%
Collisions			
Single Vehicle	31.4%	30.3%	16.7%
Urban Area	28.5%	51.5%	9.8%
Daylight	59.4%	78.8%	55.9%
Vehicles			
Vehicle Defect Present*	3.4%	9.1%	1.0%

* Excludes unknown category.

Class G trucks refers to trucks that have a gross weight less than 11,000 kilograms i.e. pickups.

Data for truck/trailer combinations requiring Class "A" driver licence are not reported in the Vehicle Registration System (VRS).

6d. Off-Road Vehicles

For the purposes of this publication, off-road vehicles include dune buggies, off-road motorcycles (dirt bikes), and three and four wheeled all-terrain vehicles. Off-road vehicles were first required to be registered on June 1, 1984 (one time registration requirement).

Table 6.10 Collision Location
by Off-Road Vehicle Drivers
Killed and Injured 1993-1997

Location	Killed					Injured				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
On-Highway	3	3	0	0	1	22	22	23	20	19
Off-Highway	2	3	6	5	3	68	63	74	46	41
Total	5	6	6	5	4	90	85	97	66	60

Table 6.11 Collision Location
by Off-Road Vehicle Passengers
Killed and Injured 1993-1997

Location	Killed					Injured				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
On-Highway	1	0	0	0	0	4	6	5	6	15
Off-Highway	0	0	0	0	1	17	23	23	9	19
Total	1	0	0	0	1	21	29	28	15	34

Table 6.12 Registered Off-Road
Vehicle 1993-1997

Year	Vehicles Registered
1993	97,104
1994	101,954
1995	106,677
1996	111,344
1997	117,438

Table 6.13 Selected Factors Relevant to
All Off-Road Vehicle
Collisions 1997

Factors	%
Drivers Under 25 Years of Age	55
Alcohol Used	18
Speeding	23
Helmet Not Worn	53
Daytime	80
Two-Wheeled	13
Three-Wheeled	13
Four-Wheeled	75

6e. Motorized Snow Vehicles**Table 6.14 Collision Location by Motorized Snow Vehicle* Drivers Killed and Injured -
Riding Seasons 1992/93-1996/97**

Location	Killed					Injured				
	92/93	93/94	94/95	95/96	96/97	92/93	93/94	94/95	95/96	96/97
On-Highway	3	2	6	3	2	37	62	36	73	72
Off-Highway	22	9	22	25	19	121	237	243	304	259
Total	25	11	28	28	21	158	299	279	377	331
% On-Highway	12	18	21	11	10	23	21	13	19	22

**Table 6.15 Collision Location by Motorized Snow Vehicle* Passengers Killed and Injured -
Riding Seasons 1992/93-1996/97**

Location	Killed					Injured				
	92/93	93/94	94/95	95/96	96/97	92/93	93/94	94/95	95/96	96/97
On-Highway	0	1	0	0	3	16	25	17	33	20
Off-Highway	2	3	2	2	2	82	63	62	103	61
Total	2	4	2	2	5	98	88	79	136	81

**Table 6.16 Registered Motorized
Snow Vehicles 1993-1997**

Year	Registered Motorized Snow Vehicles
1993	383,083
1994	391,847
1995	339,803
1996	361,596
1997	362,561

**Table 6.17 Selected Factors Relevant to All
Motorized Snow Vehicle* Collisions 1996/97**

Factors (not mutually exclusive)	%
Unlicensed Operators	9
Rider Error; Speed too Fast	35
Alcohol Used	22
Surface Condition; Icy or Packed Snow	55

* The numbers in these tables are captured under the Motorized Snow Vehicle Act (MVSA) and the Highway Traffic Act (HTA) therefore they are not comparable with the numbers in Tables 2.2 and 2.3 which are HTA reportable collisions only.

6f. Bicycles

Only collisions involving a bicycle and a moving motor vehicle or a streetcar are required to be reported. These tables do not include bicycle only bicycle/bicycle or bicycle/pedestrian collisions.

**Table 6.18 Bicyclists
Killed and Injured
1993-1997**

Year	Drivers		Passengers	
	Killed	Injured	Killed	Injured
1993	31	3,290	0	123
1994	27	3,283	0	107
1995	19	2,983	0	105
1996	20	2,863	0	109
1997	22	2,997	1	101

**Table 6.20 Selected Factors
Relevant to
All Bicycle Collisions 1997**

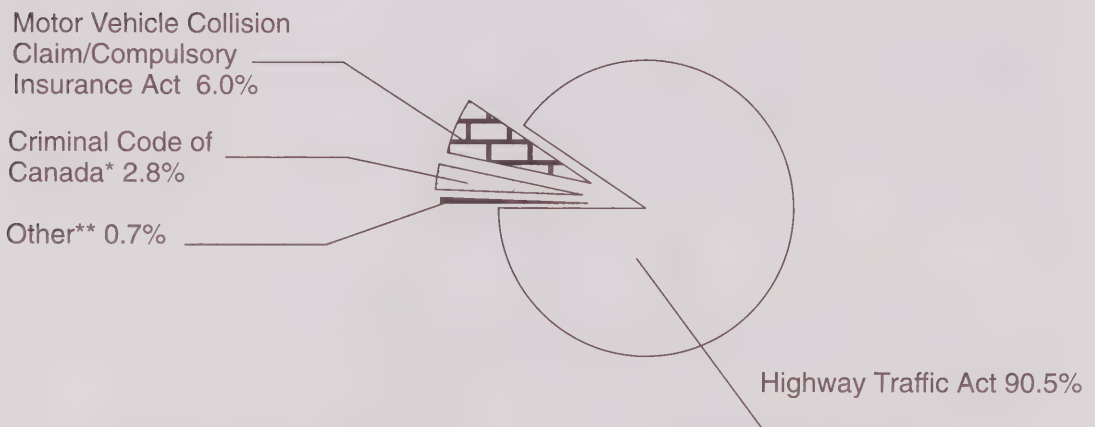
Factors	%
Driving Properly (Bicyclist)	39
Driving Properly (Motor Vehicle Driver)	49
Intersection Related	64
Going Ahead (Bicyclist)	81
Alcohol Related (Bicyclist)	3
No Apparent Vehicle Defect (Bicycle)	88
Clear Visibility	93
Weekend	20

**Table 6.19 Age of Bicyclist Involved in Collisions by
Light Condition 1997**

Light Condition	Age Groups						Total
	0 - 5	6 - 15	16 - 30	31 - 60	61+	UK	
Daylight	285	916	918	768	87	60	3,034
Dawn	0	1	7	8	0	3	19
Dusk	12	38	44	38	5	3	140
Dark	43	79	198	142	7	5	474
Total	340	1,034	1,167	956	99	71	3,667

7 Conviction, Offence and Suspension Data

Per Cent of Motor Vehicle Convictions in Ontario - 1997



* This figure does not include convictions for young offenders under the Criminal Code.

** Includes Municipal By-Law, Motorized Snow Vehicles Act, Off-Road Vehicles Act convictions and H.T.A. Regulation convictions.

7a. Conviction Data**Table 7.1** **Summary of Motor Vehicle
Related Convictions 1997**

Convictions*	Number
Highway Traffic Act	845,887
Regulation H.T.A	1,033
Criminal Code of Canada**	26,114
Municipal By-Law	2,288
Motor Vehicle Collision Claim/Compulsory Insurance Act**	55,962
Motorized Snow Vehicles Act	1,033
Off-Road Vehicle	2,300
Other	720
Total	935,337

* Includes some out of province convictions.

** This figure does not include 432 convictions for young offenders under the Criminal Code.

Table 7.2 **Motor Vehicle Convictions
Related to the
Highway Traffic Act 1997**

Convictions	Number
Equipment	17,321
Administrative*	112,751
Seat Belt (Driver & Passenger)**	53,227
Other Non-Pointable Convictions**	10,831
Speeding (< 16km/h, non-pointable)	255,936
Pointable Speeding	230,804
Other Pointable Convictions (2 - 4 pt)	122,660
Other Pointable Convictions (5 - 7 pt)	7,758
Driving While Suspended	12,250
Total	823,538

* Non-moving, weight, vehicle registration, licence renewal, etc.

** Includes some out of province convictions.

Table 7.3 **Motor Vehicle Convictions
Related to the
Criminal Code 1997**

Convictions*	Number
Alcohol Related**	21,979
Criminal Negligence	31
Fail to Remain at Collision	647
Driving While Disqualified	2,487
Dangerous Driving	970
Total	26,114

* Does not include 432 convictions for young offenders.

** Includes some out of province convictions.

7b. Offence Data

Table 7.4 Number of Convicted Drivers* with Criminal Code of Canada Offenses,
During the Specified Years 1992 to 1996¹

Conviction Type	1992	1993	1994	1995	1996
Criminal Negligence	38	44	39	35	23
Fail to Remain	919	816	786	709	617
Dangerous Driving	1,193	1,134	1,200	1,156	981
Impaired Driving	14,434	13,877	13,388	12,518	11,649
Blood/Alcohol over 80 mg%	12,329	9,135	8,982	8,892	8,450
Fail to Provide Breath Sample	1,971	1,519	1,545	1,526	1,382
Driving While Disqualified	3,157	2,840	2,662	2,419	2,509
Total	34,041	29,365	28,602	27,255	25,611

* Does not represent unique drivers, the same driver can be represented in this table more than once.

¹ As of December 31, 1997 there were 16,665 Criminal Code Offenses recorded. The 1997 breakdown will be updated in the 1998 annual report to accommodate the lag time in the recording of offenses (offenses are only recorded upon a conviction).

Table 7.5 Administrative Driver License Suspension
Monthly Suspensions Issued 1997

Suspensions	1996*	1997
January	-	1,310
February	-	1,595
March	-	1,898
April	-	1,810
May	-	2,068
June	-	1,978
July	-	1,887
August	-	1,450
September	-	1,679
October	-	1,747
November	-	1,769
December	2,013	1,820
Total	2,013	21,011

The Administrative Driver's Licence Suspension (ADLS) started in Ontario on November 29, 1996. The first complete month of suspensions shown in this table is, therefore, December, 1996.

From August 5th to 15th, 1997, ADLS suspensions were not issued due to cessation in ADLS.

Re-issuing of suspensions resumed on August 15, 1997.

See Appendix for details on the ADLS.

Data for Table 7.4 presents the number of offenses recorded as of December 31, 1997. Table 7.4 has been revised to report the number of drivers that committed a specific Criminal Code Offence (CCC) in the specified year. This table is not comparable to Table 7.4 from earlier annual reports.

7c. Suspension Data**Table 7.6 Demerit Point Suspensions by Driver Age 1997**

Driver Age	Demerit Point Suspensions				
	Probationary	Novice	Novice	Regular	Regular
		First	Second	First	Second
		Accumulation	Accumulation	Accumulation	Accumulation
16	0	2	0	0	0
17	0	68	1	0	0
18	1	278	10	1	0
19	56	256	15	16	0
20-24	310	320	35	293	22
25-34	183	201	21	396	24
35-44	35	70	1	151	5
45-54	8	20	2	56	5
55-64	1	4	0	8	1
65-74	0	1	0	2	1
75 +	0	0	0	0	0
Total	594	1,220	85	923	58

Since 1994 novice drivers have been under the new graduated licensing system. These drivers are subject to escalating actions from a warning letter at 2 to 5 points, an interview at 6 to 8 points and a 60 day suspension for a first accumulation of 9 points. After a first suspension, the points are reduced to 4 and if they attain 9 points again the subsequent suspension is 6 months.

Regular drivers are suspended for 30 days on the first accumulation of 15 demerit points and are suspended for 6 months on the second accumulation of 15 points within 2 years.

Until 1994 newly licensed drivers were covered by the probationary licence system until they had successfully completed two one-year periods of suspension-free driving. Probationary drivers were suspended for 30 days after accumulating 6 or more demerit points. The probationary licensing system ended on March 31, 1994. Drivers were grandfathered into the system by the new graduated licensing system.

8 Appendix

8a. Glossary

Ability Impaired Alcohol:

Driving while one's ability is impaired by alcohol or driving with a blood alcohol concentration exceeding 80 milligrams in 100 milliliters of blood.

Administrative Driver Licence Suspension (ADLS):

This program, designed to reduce drinking and driving, started November 29, 1996. Under this program, provincial law permits the immediate suspension of a driver's licence for 90 days upon evidence gathered by a police officer that the driver (a) was shown to have a concentration of alcohol in excess of 80 milligrams per 100 millilitres of blood or (b) the driver failed or refused to provide a breath or blood sample.

Alcohol Involved:

This category includes both drivers reported as ability impaired by alcohol and drivers reported as "had been drinking".

Class G1 Driver's Licence:

A holder of a Class G1 driver's licence:

- must have a zero blood alcohol content while driving.
- must have only one passenger in the front seat. That person, the accompanying driver, must be a fully licensed driver (Class A, B, C, D, E, F and G) with at least four years driving experience. That person's blood alcohol content must be less than .05.
- unless accompanied by a licensed driving instructor, must not drive on Ontario's "400-series" highways or on high speed expressways such as the Queen Elizabeth Way, the Don Valley Parkway, E.C. Row Expressway and the Conestoga Parkway.
- must limit the number of back seat passengers they carry to the number of seat belts in the back seats of the vehicle.
- must not drive between the hours of midnight and 5 a.m.
- may drive Class G vehicle only.

Level One lasts 12 months, but that time can be reduced to eight months by completing an approved driver education course. For information about approved courses contact any Ministry of Transportation licensing office. At the end of this level, drivers must pass a road test before proceeding to Level Two.

Class G2 Driver's Licence:

A holder of a Class G2 driver's licence:

- must have a zero blood alcohol content while driving.
- is allowed to drive any motor vehicle that requires a Class G driver's licence (e.g. an automobile) on the road.
- must limit the number of back seat passengers they carry to the number of seat belts in the back seats of the vehicle.

Level Two lasts 12 months. After completing this level, drivers will be eligible to take a comprehensive test to qualify for full licence privileges.

Class M1 Motorcycle Driver's Licence:

A holder of a Class M1 motorcycle driver's licence:

- allows the holder to operate a motorcycle for the purposes of training.
- must have a zero blood alcohol content while driving.
- is only allowed to drive during daylight hours (one-half hour before sunrise to one-half hour after sunset).
- is only allowed to drive on roads with speed limits of 80 km/h or less, except where there is no other route you can drive. You may drive on highways 11, 17, 61, 69, 71, 101, 102, 144, and 655.
- may not carry passengers.

Level One lasts at least 60 days, and the licence is valid for 90 days. Level One drivers must pass a motorcycle road test before proceeding to Level Two. Alternatively, during Level One they may take an approved motorcycle safety course that includes a road test, instead of the ministry road test.

Class M2 Motorcycle Driver's Licence:

A holder of a Class M2 motorcycle driver's licence:

- must have a zero blood alcohol content while driving.

After completing Level Two, drivers will be eligible to take a comprehensive test to qualify for full licence privileges.

Conviction:

Awarded when a person pleads guilty to, or is found guilty of, an offence related to a motor vehicle under any Act of the Ontario Legislature or its accompanying regulations, under the Parliament of Canada or any accompanying order, or under any municipal bylaw.

Driver:

Unless specified otherwise, any person, whether licensed or not, considered to be in care and control of a vehicle at the time of an collision.

Had Been Drinking:

Driving after having drunk an amount of alcohol not considered sufficient to be legally impaired or with a measured blood alcohol count of greater than zero but less than 80 milligrams. Blood alcohol concentration between .05 and .08 results in a 12 hour suspension.

Highway:

A common and public highway, street, avenue etc., any part of which is intended for public use or used by the general public for the passage of vehicles and including the area between the property lines.

Kilometres Travelled:

Vehicle fleet mileage is estimated on the basis of taxed gasoline and motor fuel sales. Total litres sold are converted to kilometres traveled based on a conversion factor of 22.0 kilometres per gallon.

Major Injury:

A non-fatal injury severe enough to require that the injured person be admitted to hospital, even if for observation only.

Minimal Injury:

A non-fatal injury, including minor abrasions and bruises, which does not necessitate the injured person going to a hospital.

Minor Injury:

A non-fatal injury requiring medical treatment at a hospital emergency room, but not requiring hospitalization of the involved person.

Motor Vehicle Collision:

Any incident in which bodily injury or damage to property is sustained as a result of the movement of a motor vehicle, or of its load while a motor vehicle is in motion.

Off-Highway Collisions:

An off-highway collision involving any of the motorized vehicles which are covered by legislation under the Highway Traffic Act, the Motorized Snow Vehicles Act, and the Off-Road Vehicles Act.

On-Highway Collisions:

A motor vehicle collision which occurs on the highway between the property lines.

Pedestrian:

Any person not riding in or on a vehicle involved in a motor vehicle collision.

Fatal Collision:

A motor vehicle collision in which at least one person sustains bodily injuries resulting in death. Prior to January 1, 1982, fatal collision statistics included deaths attributed to accidental injuries up to one year after the collision. Since that date, only deaths from injuries within thirty days of the collision have been included.

Personal Injury Collision:

A motor vehicle collision in which at least one person involved sustains bodily injuries not resulting in death.

Property Damage Collision:

A motor vehicle collision in which no person sustains bodily injury, but in which there is damage to any public property or damage to private property* including damage to the motor vehicle or its load.

Reportable Collision:

Any injury collision, or property damage to private property in excess of a monetary value prescribed by regulation.*

Self-Reporting of a Collision:

Self-reporting of a Collision. Under a new section of the Highway Traffic Act [§199 (1.1)], when one is in a collision in which there is only property damage (no injury or death, and, among other conditions, no criminal activities such as impaired driving) the involved person(s) may report the collision immediately by proceeding with one's vehicle to a Collision Reporting Centre. Self-Reporting of a collision was introduced on January 1, 1997.

Suspension:

Withdrawal of a drivers' privilege to operate motor vehicle for a prescribed period of time.

* The minimum reportable level for property damage only collision rose from \$200 to \$400 on January 1, 1978 and rose again to \$700 on January 1, 1985.

8b. Acknowledgement

The Ministry of Transportation would like to acknowledge the following offices for their assistance:

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Ministry of Finance

Knowledge Management Unit

Information Planning and Evaluation Branch

Ministry of Health

Information Planning & Court Statistics

Program Development Branch

Ministry of the Attorney General

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